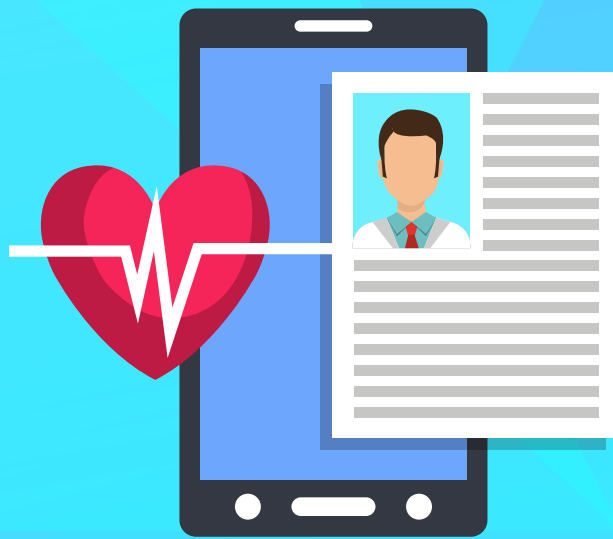


# TELEMEDICINE DIGITAL ETHNOGRAPHY REPORT



# BACKGROUND

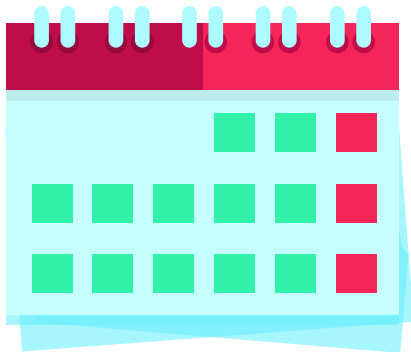
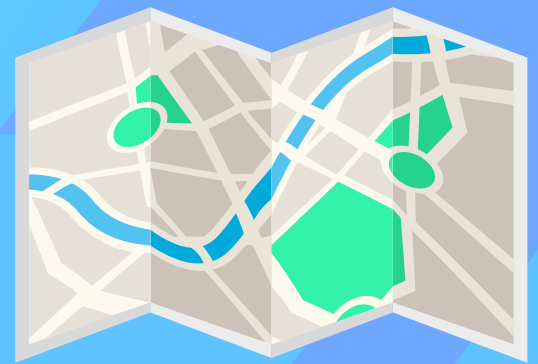
Telemedicine is often hailed as a cost-saving innovation in healthcare.

Healthcare institutions and virtual health providers often promote telemedicine as a convenient and cost-effective alternative to in-person visits:

## 3 Reasons to Use Virtual Visit

### Convenience

See a provider using your phone, tablet or computer from anywhere!  
And how offering free Rx delivery\*



### No Appointment Needed

There's no scheduling needed.  
Start an appointment whenever you need to.

### 24/7 Access to Quality Care

We're available around the clock to give you a fast and accurate diagnosis.



Despite often being hailed as a new technological development, the idea of telemedicine has been around for many decades the first discussion of using the telephone to reduce unnecessary office visits dates back to 1879.

Of course, telemedicine's potential has grown rapidly in more recent decades with the rise of the internet.



Use of telemedicine has increased significantly. According to a study published in 2018, annual telemedicine visits increased from 206 visits in 2005 to 202,374 visits in 2017, which represents an average compound growth rate of 52%. A survey conducted in 2019, found that 66% of Americans are willing to use telehealth and 8% have experienced a telehealth visit.

The adoption rate amongst providers is also increasing, with a study reporting in 2017 that 71% of healthcare providers in the United States have adopted some form of telemedicine.



The adoption of telemedicine, its efficacy and potential applications are developing with technological advances and capital investments – but how well do patients' experiences with telemedicine live up to the hype? What can healthcare providers do to ensure that telemedicine experiences meet patient expectations? What are common barriers that must still be surmounted to increase adoption amongst both patients and medical professionals?

In order to address these questions and better understand the lived experiences of patients and healthcare professionals, MDRG has conducted an internal study exploring patient and professional experiences engaging with telemedicine.



Our research approach included a review of existing research publications, as well as an ethnographic exploration of Reddit comments. Reddit is a rich source of ethnographic material that provided insight into the perspectives of patients and medical professionals alike.

# SUMMARY OF FINDINGS

Medical professionals are more **cautious** than consumers of telemedicine's impact on healthcare delivery.

However, they are also more **cognizant of the diverse forms of value** that might be derived from the application of telemedicine.

Some patients feel that telemedicine lacks real value because they are so often directed by telemedicine providers to go to an ER, family doctor, or urgent clinic. They see the value of telemedicine as **intrinsically limited** care. Previous research also indicates that some of the primary barriers to its use amongst consumers revolve around **lack of awareness and knowledge**.

Others who have used telemedicine see it as offering diverse forms of value: **knowledge, guidance, reassurance, comfort, convenience, and transparency**.

## **Strategies for overcoming barriers to telemedicine include:**

- ✓ Personalizing services through a consistent point of contact
- ✓ Designing programs for healthcare scenarios that consumers and physicians see the most value in
- ✓ Targeting insurance companies and payors (e.g. employers, unions)
- ✓ Highlighting telemedicine's perceived benefits and most impactful use-case scenarios.

# Consumers:

## Perceived Benefits

Information and guidance

Reassurance (e.g. confirmation that an ER visit is not necessary – or is)

Comfort and convenience (e.g. advice from the comfort of home)

Transparency of costs (before receiving care) and affordability

## Most Impactful Use Cases

Receiving mental health care

Prescription renewals

Providing notes for sick days

Accessing healthcare in remote areas

Obtaining expert information advice for managing pregnancies, children's health issues conditions, chronic conditions, and first aid

# Medical Professionals:

## Perceived Benefits

Affordability (mitigates healthcare costs)

Accessibility (e.g. provides access to underserved areas, enables work from home, grants access to experts for diagnosis and treatment)

Knowledge (e.g. between experts, for patients)

## Most Impactful Use Cases

Managing follow-up appointments

Providing healthcare information and advice

Mental health or addiction treatment

Health coaching and preventative health management

Providing birth control prescriptions

Addressing medication compliance issues

Serving underserved, rural and remote areas

# DETAILED FINDINGS

**1. Limited exposure to the potential of telemedicine acts as a barrier to use amongst patients.**

## Intrinsically Limited

Some patients feel that telemedicine lacks real value because they are often directed to go to an ER, family doctor, or urgent clinic. Telemedicine perceived as **intrinsically limited** in its value. Some also feel that there are alternative sources of healthcare information they can access at **less cost and greater convenience** (e.g. google, WebMD).

“ I find it to be quite useless. Started calling periodically when I became a parent mostly and it's never been a help once to me. I get the same answer every time: "Go see your doctor, or the ER if it's after hours." ”

*My theory has always been that the only benefit of telehealth is to filter out a certain type of hypochondriac that just needs to hear human reassurance to feel better without discouraging the type of person who typically avoids seeking medical help. ”*

## Lack of Consumer Awareness

Studies report that preferences for in-person care, and a lack of consumer awareness are likely limiting its use. According to a study conducted by American Well, aside from a lack of awareness, the primary barriers to consumer telehealth adoption include (in order of most significant barrier to least significant barrier)

- ✓ A preference for in-person care (particularly amongst older generations)
- ✓ Concerns about privacy
- ✓ Uncertainty about reimbursement (through insurance)
- ✓ Concerns about technology (least significant barrier)

**2. However, some patients see telemedicine as offering diverse forms of value. They see it as a source of information, guidance, reassurance, comfort, convenience, and transparency.**

# Information and Guidance

They see telemedicine as a more **accurate and trustworthy** resource for obtaining information than other commonly used resources like web searches or WebMD. They tend to be particularly interested in receiving information on steps to help speed up recovery, caring for children or family members with a health condition or issue, managing pregnancy, or delivering first aid.

*“ I have always had a good experience through my pregnancy and with my infant daughter when I needed to call. They’ve only referred us to the ER once and it turned out to be a very serious situation with my daughter that I thought was nothing. They’ve even given me tons of advice for how to manage things at home.*

*I had the ER thing happen a lot of times, but I realized they're not going to give a diagnosis over the phone. They're great for information though, I've used them to find out if there are any issues with mixing certain medications. ”*

# Reassurance

Patients see telemedicine as a tool for **mitigating their concerns** and receiving reassurance that nothing is seriously wrong – or receiving encouragement to visit an ER or physician urgent care center if an issue is significant.

*“ Overall, I see this service as a sanity check.*

*I have called them a few times, mostly because friends of mine would be in severe pain but are resistant to just going to doctors. To test if it is my nerves or a genuine concern, I call them and wait for their answer. ”*





## Comfort and Convenience

They see value in the ability to **avoid travel or waiting rooms** to receive care, which is particularly valued when patients are experiencing discomfort and/or live in rural or remote areas.

“*Telehealth has helped me out a lot, especially now since my Primary Care is almost two hours away. I've used it countless of times from simple things like colds to the flu. I would recommend this to anyone who has the telehealth feature on their insurance.*

*Plus, you are not sitting in a waiting room with other sick people exchanging germs*”

## Transparency and Affordability

Patients greatly value **knowing the cost** of a telemedicine service before use, which they see as a rarity in the world of healthcare. They think of it as more affordable than other healthcare options.

“*This is an affordable way for them to get a professional opinion while knowing the cost up front. It's \$59. It's rare that I actually know the cost of the visit ahead of time.*

*Just used this app and was blown away. It accepted my insurance and I had a \$0 copay, which is \$15 less than my normal doctor's office and \$25 less than going to Urgent Care (it's midnight here). I only had to wait 4 minutes to connect with a doctor. We chatted for 15 minutes and then the doc sent my prescription out to a 24/7 CVS. I'm still in shock that I was able to do all this in the middle of night, quickly, from home, and for free.*”





## Most Impactful Use Case

Patients primarily see telemedicine as useful for receiving mental health care, prescription renewals, accessing healthcare in remote areas, and obtaining information and advice from experts for managing pregnancies, children's health issues or conditions, chronic conditions, and first aid.

Research conducted by Jama Network found that parents who use telemedicine are apt to see it as valuable for providing care to their children. Of all patients who have used telehealth, 70% have children living in their household. Although only 20% of consumers described themselves as willing to use telemedicine for their children. The results suggest that parents are hesitant to use telemedicine for their children, but once they do try telemedicine for their children, they see its value.

Previous research shows that millennials are particularly apt to see telemedicine as valuable for mental health care.

### **3. Medical professionals are wary of telemedicine's detrimental impact on quality of care and their own professional working conditions.**

## Legal Liabilities

The most significant barriers to use amongst medical professionals include fear of legal liabilities.

*“Telemedicine for the most part is a lawsuit waiting to happen. That one case of missed acute appendicitis that was misdiagnosed as constipation is all it will take to shut it down.”*



## Quality of care

Medical professionals also have trepidations about the **potentially damaging impact** of delivering care remotely. Some are fearful that telemedicine could potentially damaged to patient **trust, lower quality of care, and lead to the over-prescription of antibiotics.**

“ I've worked in an ICU as an intensivist with nightly telemedicine coverage. It was basically a train wreck. I don't know if it's the medium or the guy sitting behind the terminal, but even an abject imbecile with a tremor can make a better assessment of a patient in person than anyone sitting behind a terminal hundreds of miles away.

I think using telemedicine to replace the physician/patient relationship is destructive over time. It's ok to communicate by email, text, whatever. When it comes to prescribing, there's something inherently off if there isn't a face to face relationship. ”

## Working Conditions

Some professionals are also wary that telemedicine will offer lower quality **working conditions** than in-person clinical care. They feel that delivering care via telemedicine can be **mundane, dehumanizing, and stressful.** Nurses were particularly apt to be wary of how telemedicine might negatively impact their working experience and environment.

“ They tried to recruit me, and they partner with Stanford... but it seemed somewhat shady and I wasn't too psyched about being a "doc in a box" on the phone all day taking calls at what is basically a glorified medical call center.

I've worked directly with some of the VA phone-based hotline nurses/PAs when my patients happen to be vets- the VA staff I've dealt with always seem kind of miserable and overworked. They seem "script based" which can really suck... basically you're supposed to follow a flow chart and can't deviate off the questions and workflow you are supposed to say on your script. Which is ridiculous and impossible, depending on how strict they are with the call center nurses. You feel like a robot. ”

4. Some medical professionals are hopeful that telemedicine might help address persistent problems in healthcare (e.g. overworked medical professionals, underserved patients, rising costs, etc.). Their knowledge grants them the ability to identify far more diverse forms of value and potential in telemedicine than consumers.

## Lowering Healthcare Costs

They associate telemedicine more strongly with overall healthcare costs than do consumers. They see telemedicine as **mitigating healthcare costs** by keeping people out of the ER for frivolous issues and limiting the need for on-call physicians by enabling them to work remotely.

“ They give out second opinions, do utilization reviews, give medical advice and medication consults, basically. It does help with compliance and brings plan costs way down because people will call the doctors instead of going to the ER for something frivolous.

*I can't speak to their quality, but I hope it works out. Medicine as a field is really inefficient. Doctors are overworked, and patients are underserved. Anything that reduces the inefficiencies in the system can only increase compensation and help more people get care. ”*

## Sharing Information and Expertise

They see the ability to **easily convey information and advice** to consumers as one of the primary benefits of telemedicine. They also see telemedicine as valuable for providing access to the services and knowledge of **geographically dispersed experts** in certain specialties (e.g. teleradiology, teleneurology, etc.), as well as for **conducting trials and delivering medications** remotely.

“ Teleneurology is a very good thing, especially for rural ERs that could barely get a neurologist on the phone before. Now you can get direct visual input into treatment of status (vs pseudoseizure) and when a stroke needs to be flown to a comprehensive center for a thrombectomy. Patients are simply going to get better care under this arrangement. ”

*“ We use it on night shifts for cranial CTs at our clinic. It's a much-needed help when you've to quickly diagnose an intercerebral bleeding or stroke in the middle of the night. It also helps the clinic financially by not having an on-call radiologist for a whole night every night. I am not saying it's foolproof. But it's been very useful, and I'd love to see the technology develop further in the next few years.*

*Telehealth means the doctors and nurses there don't need the superhuman ability to know how to treat every disease that comes their way without outside help. ”*

## **Ability to Work Remotely**

Some medical professionals find the idea of being able to work remotely appealing.

*“ Our ER uses tele-psychiatrists for late night consults for suicidal and other acute psychopathologic cases. Working from home is probably nice. ”*

## **Most Impactful Use Case Scenarios**

They see telemedicine as most useful for managing follow-up appointments, providing healthcare information and advice, mental health or addiction treatment, health coaching and preventative health management, providing notes for employee sick days, providing birth control prescriptions, and for addressing medication compliance issues. They also see it as a solution for providing care to underserved, rural and remote areas.

Some are hopeful that the range of circumstances in which telemedicine can be applied will continue to grow.

*“ We use it extensively for follow up appointments, as many initial appointments require a solid physical examination to achieve a diagnosis.*

*Personally, I believe it's a big part of the future of medicine and the range of specialties it will incorporate will expand. The technologies to make it possible already exist. As far as the physical exam goes, a well-trained nurse can (in full view of the physician who is camera'ing in) do as good a physical exam as a doctor. ”*



“ In my experience, where I really see Telehealth really working is for mental health and addiction issues. Same with medication compliance issues and preventative health- weight loss/obesity/DM Type II management. If I do a health-coaching check in call with an anxiety patient who goes to the ER 2x a month when he can't sleep, sometimes my check in call will prevent an ER visit.

I will say as a call center nurse I've reached and improved outcomes in super stubborn noncompliant patients who we never would have had the inroads to stay on top of via traditional appointments... ”

**5. Potential strategies for overcoming barriers revolve around creating programs that speak to consumer and provider needs and highlighting telemedicine's unique strengths.**

## **Personalize Telemedicine Services**

Some patients felt they might be more drawn to telemedicine if it were to offer them personalized service from a consistent point of contact, rather than connecting them with different healthcare professionals for each use.

“ There should be a more personalized service. Instead of always getting a random nurse. Route all patients of your doctor to the same set of nurses. Or some way so it's less random and there is chance you get the same nurse again. Makes for better service. ”

## **Design Programs Consumers and Physicians see the Most Value In**

Create telemedicine programs that consumers are apt to see the most value in – such as those providing mental health care (especially for millennials), prescription renewals, accessing healthcare in remote areas, and obtaining information and advice from experts for managing pregnancies, children's health issues or conditions, chronic conditions, and first aid. Physicians are also most likely to support programs they see as an appropriate and valuable application of telemedicine.

# Target Insurance Companies and Payors

Previous research recommends targeting insurance companies and payors (e.g. unions, employers), rather than consumers themselves.

Providing telemedicine via insurance companies and payors has already proven to be the most effective approach for encouraging consumer adoption.

*“The key is to target the insurance companies or the payors (unions, employers) to pay for it, not the patients themselves, the patients will never opt to pay for it directly.”*



## Highlight Telemedicine's Strengths: Information, Guidance and Reassurance

Current users of telemedicine see its primary benefits in terms of the information, guidance and reassurance it offers them. These benefits should be clearly communicated in information available to consumers (even if they are not the primary targets of marketing), since a lack of awareness and knowledge about telemedicine acts as a barrier to adoption.

# OBJECTIVES

Telemedicine has been hailed as a cost-saving innovation in healthcare. I propose conducting research that explores how the lived realities of telemedicine measure up to these claims.

- ✓ Explore patient experiences being treated through telemedicine
- ✓ Explore medical professionals' experiences delivering care through telemedicine
- ✓ Understand patients' perceived benefits and downsides of telemedicine
- ✓ Understand medical professionals' perceptions of telemedicine, including primary challenges and benefits
- ✓ Identify strategies for overcoming common barriers to implementation (by patients and professionals)

# METHODOLOGY

## Digital ethnography

Review patient and physician posts on reddit, Facebook, and other social media



## Literature review

Review relevant research publications





# SOURCES

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