

# Telemedicine: The Promise and the Reality

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Chair, Psychiatry and Behavioral Medicine

# Conflicts

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None

# AGENDA

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- The promise of telemedicine
- Current forms and formats of telemedicine
- Pragmatic challenges of implementation
- Constraints of utilizing telemedicine
- Involving residents and fellows
- What does the future have in store?



Telehealth uses communication technology to deliver healthcare services to patients without the need to be in the same physical location

Video, Chat, or Apps

Using webcams, phones, or video conference software



- According to the Centers for Disease Control and Prevention (CDC), telehealth utilization spiked by more than 154% in late March of 2020 compared to the same period in 2019.
- While usage over time has subsided since the peak of the pandemic instrumental part of the future of healthcare delivery.

## A snapshot of telehealth trends



**38x**

Telehealth utilization has stabilized at levels 38 times higher than before the pandemic.

**57%**



of providers view telehealth more favorably than before COVID-19 and 64% are more comfortable using it.



Telehealth uptake varies by specialty, with the highest penetration in psychiatry.

Source: Telehealth: "A quarter-trillion-dollar post-COVID-19 reality?" McKinsey & Company, July 9, 2021



# The promise of telemedicine

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- Enhance the patient-physician relationship
- Increase access to care
- Improve health outcomes by enabling timely care interventions
- Telehealth visits can enable physicians to get to know their patients by observing them in their home environment, contributing to more personalized treatment plans and supporting better referral to community-based services.

<https://www.aafp.org/news/media-center/kits/telemedicine-and-telehealth.html>

<https://www.aafp.org/about/policies/all/telehealth-telemedicine.html>

# Increased patient utilization

- In a survey conducted by McKinsey, 76% of patients said they would be interested in using telehealth moving forward
- Over half of respondents in a study said they would use telehealth to:
  - refill medications
  - prepare for an upcoming visit
  - review test results
  - receive education

- <https://healthcaretransformers.com/digital-health/future-of-telehealth>
- Fortune Business Insights. (2021). <https://www.fortunebusinessinsights.com/industry-reports/telemedicine-market-101067> [Accessed June 2021]
- Bestsenny et al. (2020). Article available from <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality> [Accessed August 2021]
- American Medical Association. (2020). Article available from <https://www.ama-assn.org/system/files/2020-02/ama-digital-health-study.pdf> [Accessed August 2021]
- Ebbert et al 2021 Patient preferences for telehealth services in a large multispecialty practice, <https://doi.org/10.1177%2F1357633X20980302>



# Improved chronic care management

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A large portion of patients do not follow through with their treatment, do not take or refill their repeat prescriptions, or do not attend their regular follow-up appointments to help manage their symptoms.

Telehealth has the **potential** to reduce the cost of care and improve patient engagement and adherence.

Telehealth is a convenient way for patients to connect to their doctor quickly and frequently.

Removing the need for lengthy waits in waiting rooms and the cost of commutes to the doctors' office





# Improved Patient Experience

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Patient demand has been the greatest driving force.

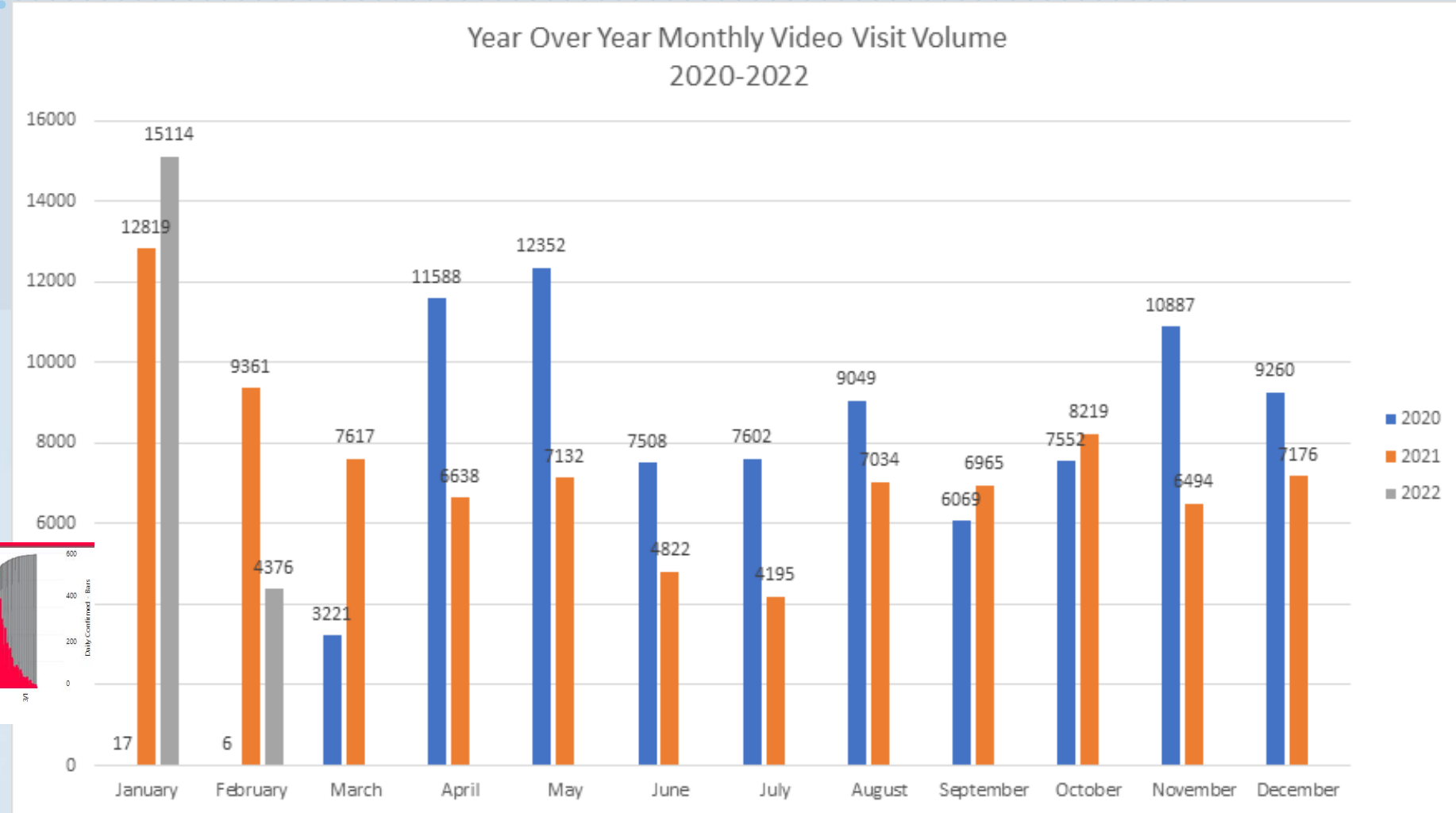
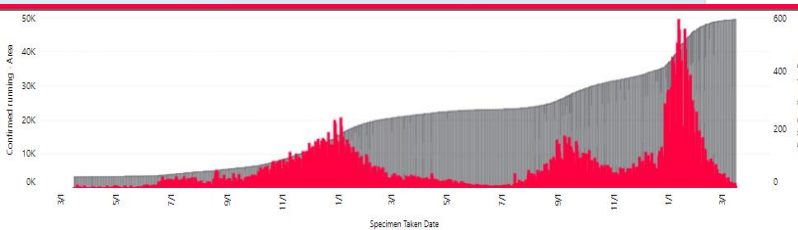
As demand continues, a greater expectation will be placed on providers.

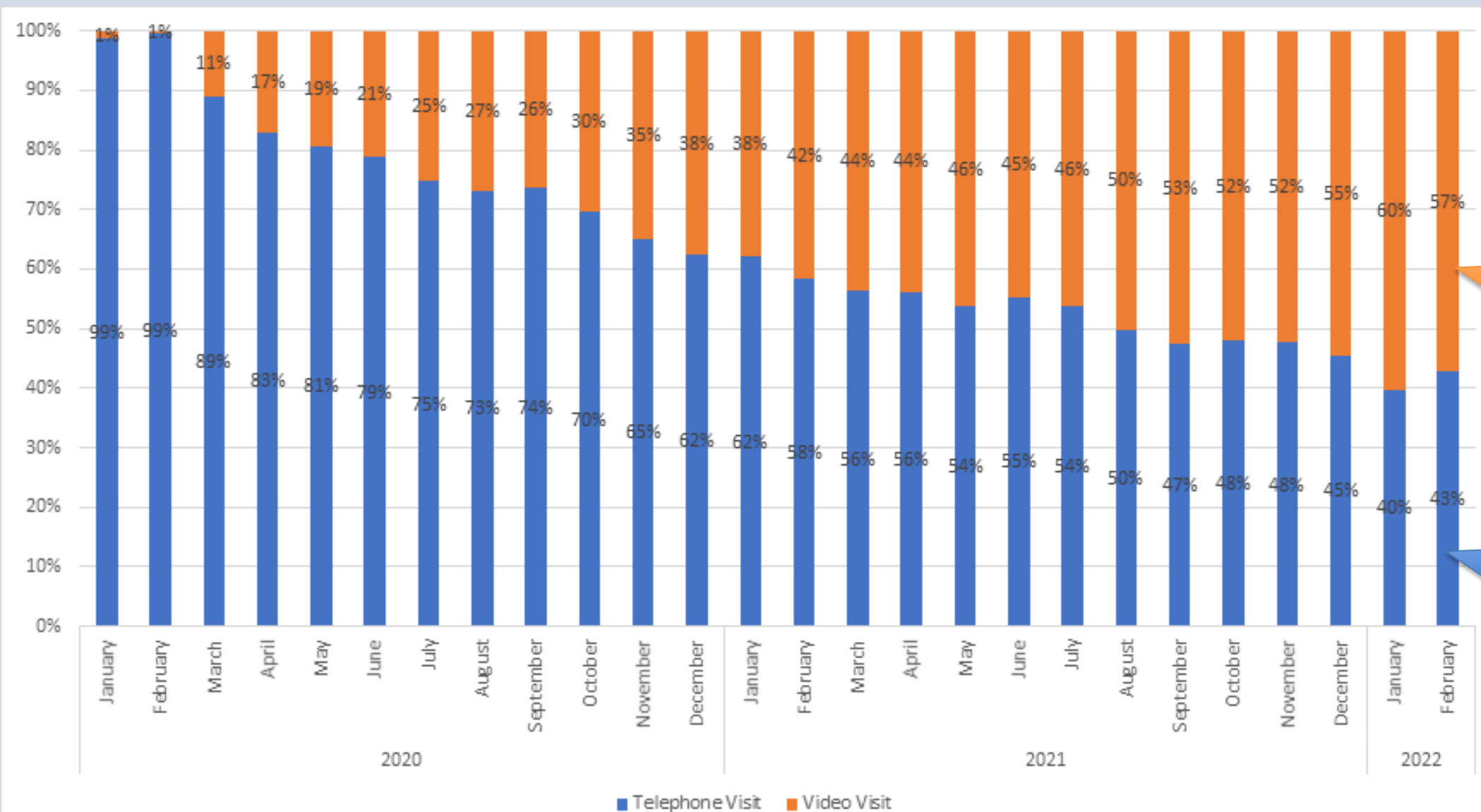
Patients want telehealth to be seamless and integrated: video, webchat, and bots, real-time updates, reminders and follow-up appointments.

Doctors and staff want this, too!



# Carilion's Experience



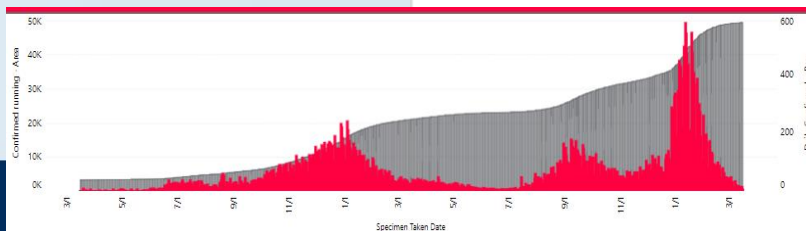
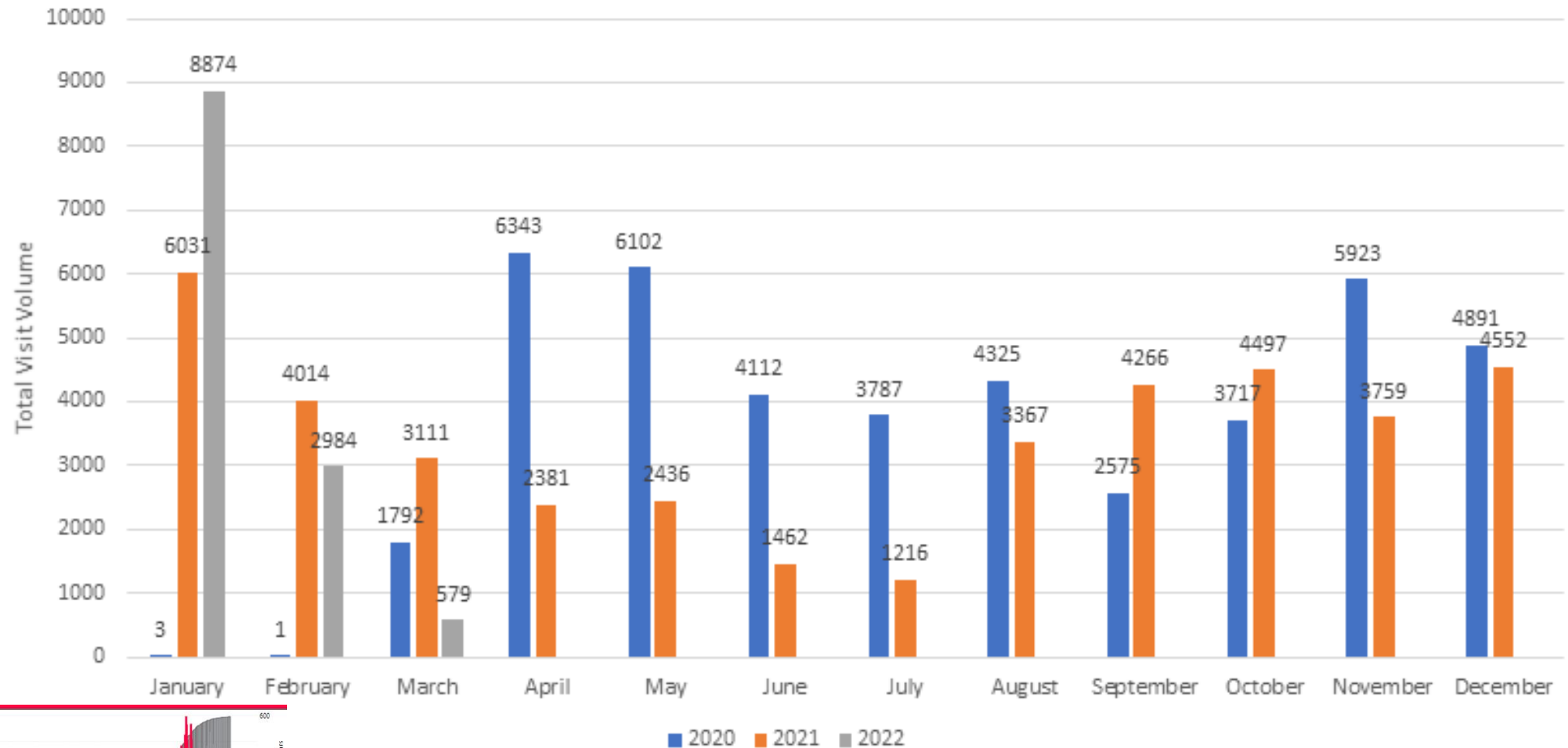


Video

Audio Only



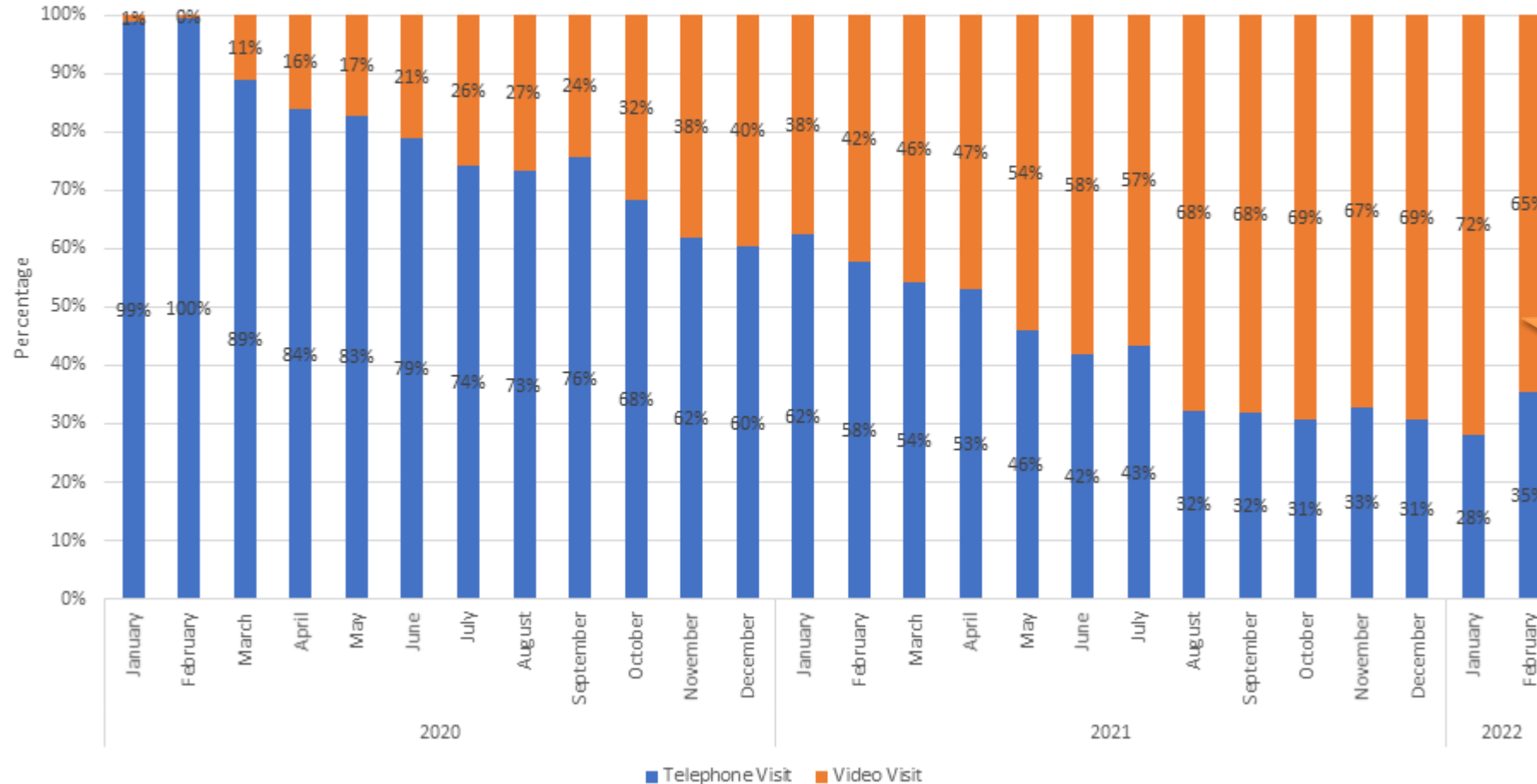
# Year Over Year Monthly Video Visit Volume Carilion Clinic, Family and Community Medicine January 2020 - March 15 2022



Data Source: Digital Health Dashboard, data pulled from EPIC 3/16/22  
Volume includes video visits only



# Virtual Visits Percentage Audio vs. Video Family and Community Medicine January 2020 - February 2022



Video

Audio  
Only

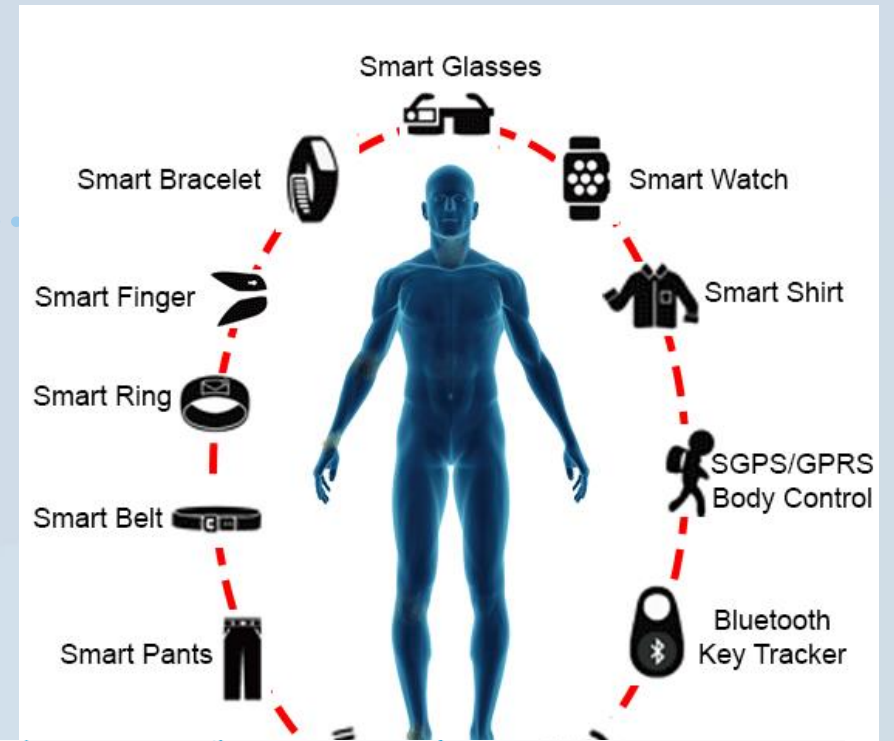


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It's not just audio and video!



# Wearable technology and remote patient monitoring



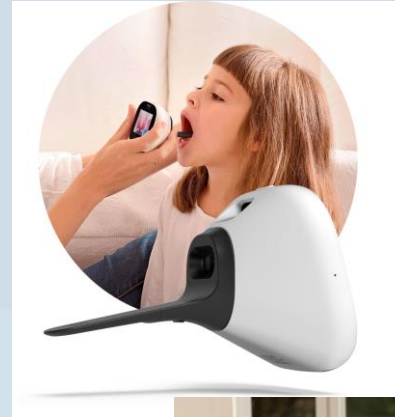
# remote healthcare monitoring





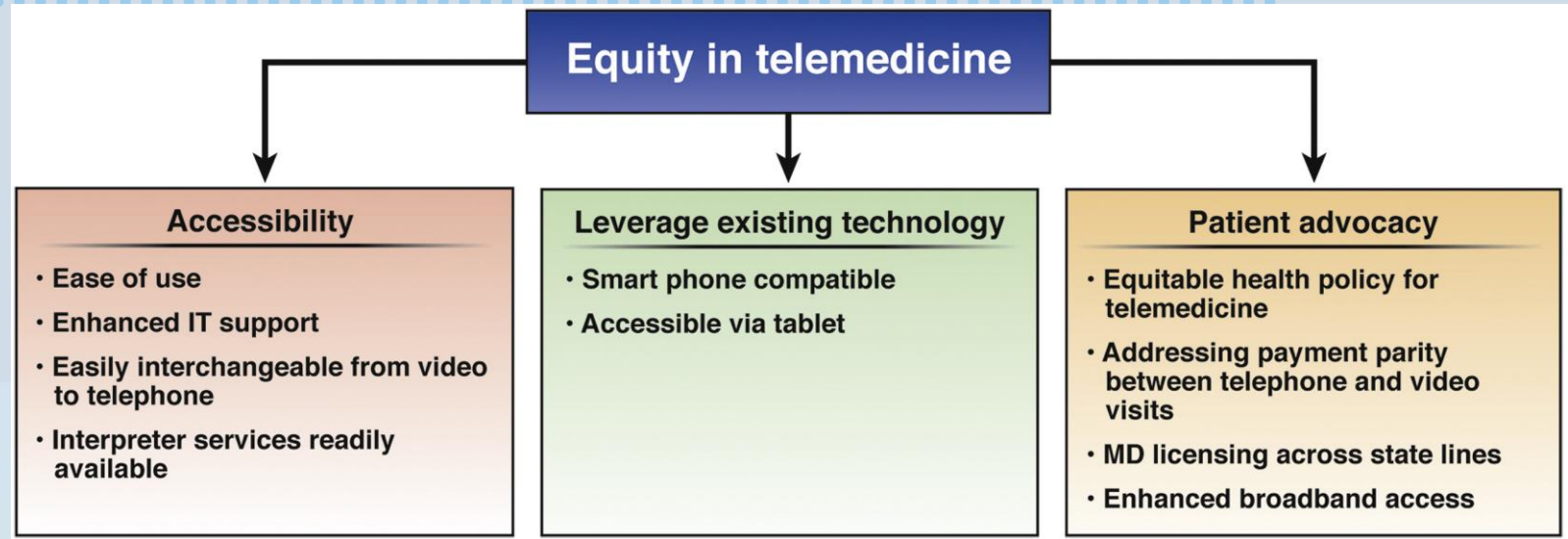
# Convenient remote pediatric care

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# The promise of telemedicine

## Health Equity



# Forms and Formats of Telemedicine: Pragmatics

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- Replacement of face to face with video or audio-only
- Remote monitoring
- eConsults
- Collaborative Care

## What is an eConsult?

An eConsult is a billable electronic consultation between different specialties within Carilion.

The request and response occur via Epic in basket.

Providers receive 0.4 RVU Credit.

In-person visit is avoided

Question response within 2-3 days.

## What type of Questions are Appropriate?

Questions should be able to be answered with the information supplied and available within Epic.

If any required labs have not been completed, submit the eConsult and the specialist will wait for lab results before replying.

If the question is too complex, an in-person visit may be suggested.





**CARILION**CLINIC

# eConsult News

**eConsult 2.0 is finally here!!**

Dr. Ted Polverino (FCM)

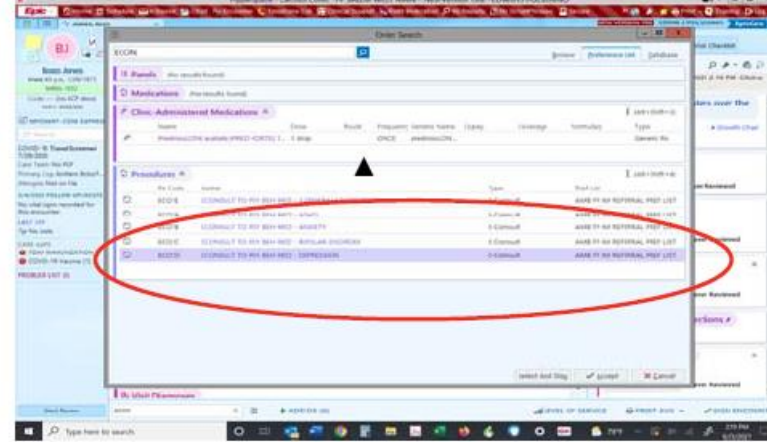
Dr. Renee Beirne (IM)





Find info on placing an eConsult:

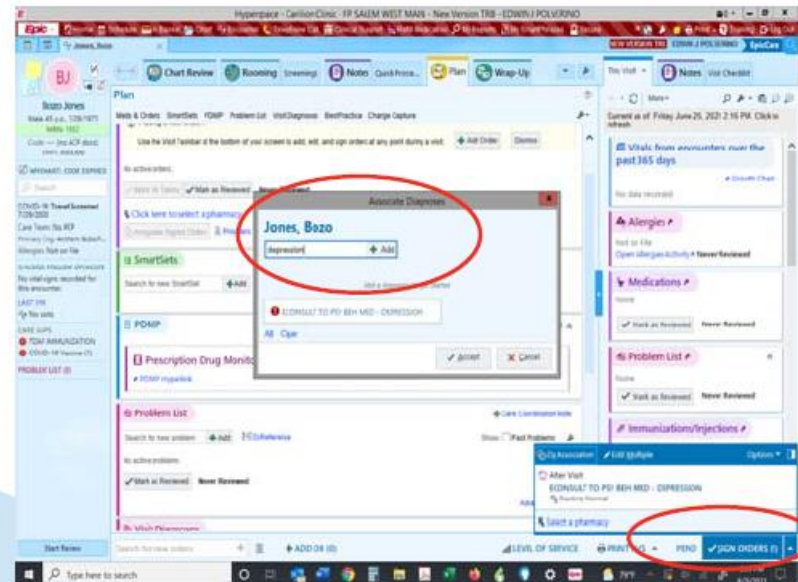
- Epic Learning Home Dashboard
- Epic Help
- Carilion Live
- Department Shared Drive
- Ask questions during site Quality Meetings



Current eConsult options:

- Allergy
- Cardiology
- Dermatology
- Endocrinology
- Endocrinology-Diabetes
- ENT
- Geriatrics
- GI
- Hematology/Oncology
- Neurology - **NEW**
- Neurosurgery - **NEW**
- Palliative care - **NEW**
- Psychiatry
- Child Psychiatry
- Rheumatology
- Vascular Surgery

2. Fill out the order template that pops up.
3. Enter diagnosis & sign order.



# Pragmatic challenges of implementation

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If you've experienced challenges when conducting telemedicine visits with patients, or simply want to improve your efficacy in video visits, take part in our provider education series!

Amwell Medical Director Cynthia Horner, M.D., (a family physician!) will lead two educational sessions about how to conduct an effective virtual visit from start to finish.

She will offer tips and tricks to streamline the remote process and answer your questions.

Open to any Carilion health care professional.

# Pragmatic challenges of implementation

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Both sessions cover the same topics and are available through Teams  
Wednesday, March 30 at noon  
or Monday, April 4 at 5 p.m.

Registration is required, and sessions will be recorded. Once registered, save the date and expect an email that includes a link to the session.

You can copy the registration link below into your web browser to register.

<https://web.cvent.com/event/e48bbffb-93c9-47a4-bdb5-77b5d568524a/summary>



# Constraints of Utilizing Telemedicine

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- Legal boundaries
- Location
- Controlled substances prescribing
- Licensure
- HIPAA

# Coding Requirements

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Time MUST be documented and documentation MUST be supported.

When billing for ambulatory Video visits

E&M Codes (CPT Codes 99201 – 99215)

Specify whether it is by audio-only or by video

Documentation MUST state location of patient and location of provider

Primary Care Coding Consultant:

Deneen Grisetti [dxgrisetti@carilionclinic.org](mailto:dxgrisetti@carilionclinic.org)

# Coding requirements

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Smart Phrase MUST be used

“The identity of the patient, their current location (home) in the state of Virginia was verified. The patient was then informed about the process of using telemedicine for evaluation and treatment following the COVID 19 verbal consent prompts for telephonic. We discussed the ability to opt out of participating in the telemedicine encounter, ask questions, security issues and sharing information. The patient consented to proceed with the telemedicine encounter visit.”

# Coding requirements

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**Documentation MUST state location of patient and location of provider**

## **Telephone visits**

CPT Code 99441 = 5 – 10 min

CPT Code 99442 = 11-20 min

CPT Code 99443 = 21-30 min

## **Telephone visits (Non-Physician)**

CPT Code 98966 = 5-10 min

CPT Code 98967 = 11-20 min

CPT Code 98968 = 21-30 min

# Constraints of Utilizing Telemedicine

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From our Coding Department:

“In the beginning and still from time to time a provider will forget to document time or forget to document either phone or video. Very rarely, they will forget to use the smart-phrase that states where the patient is located and where the provider is located.

Sometimes, a provider just has a bad day – nobody is perfect, and they will use the wrong code. If I see it as a trend, I send the provider education. If it happens just once in a blue moon – I correct it and let the provider know I corrected it.”

# Coding requirements

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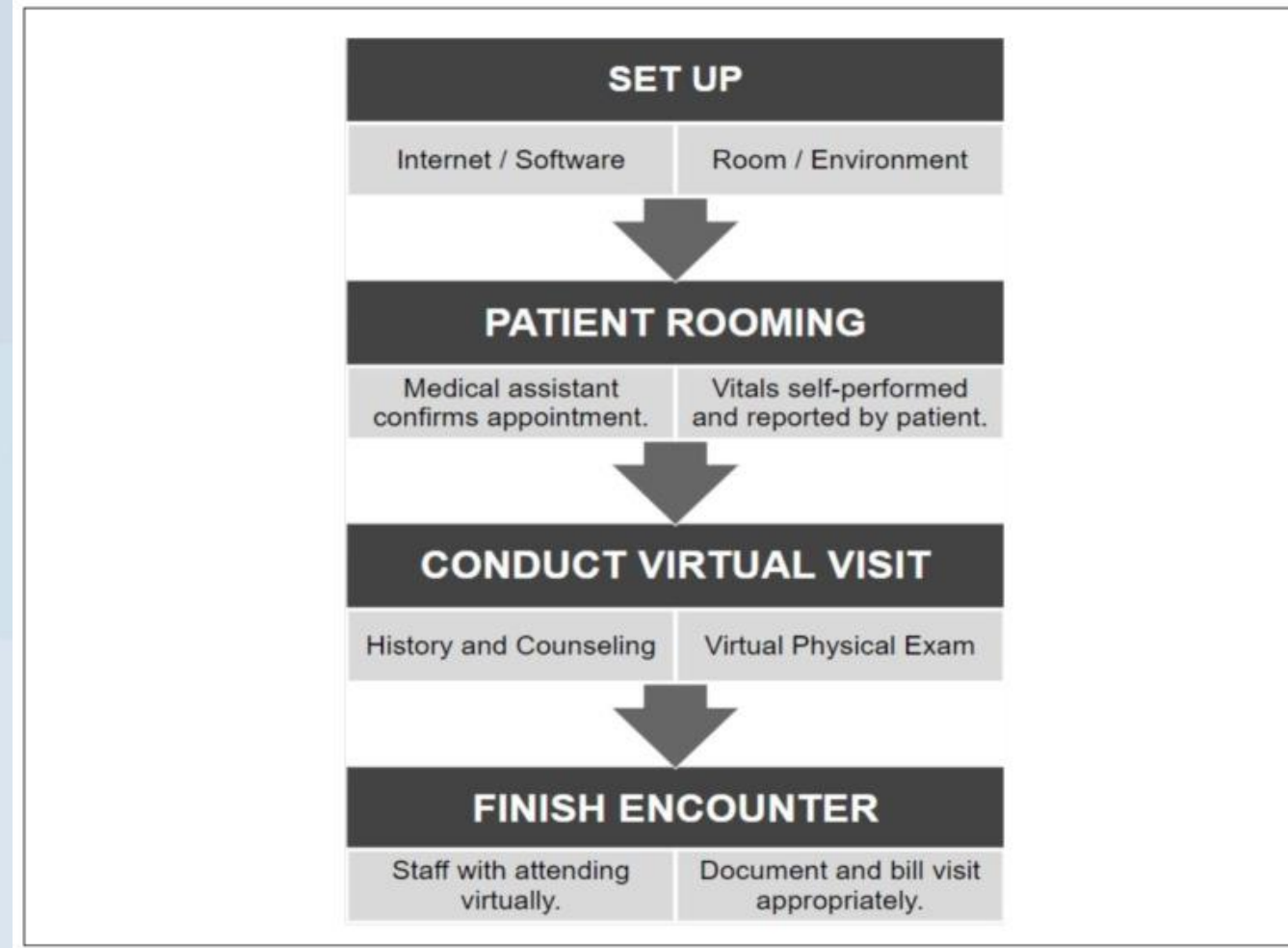
More info and scenarios for use during COVID and in general:

<https://www.aafp.org/family-physician/patient-care/current-hot-topics/recent-outbreaks/covid-19/covid-19-telehealth.html>

# Involving residents and fellows: absolutely!

## Process Map of Telemedicine Visit Workflow at Stanford-O'Connor Family Medicine Residency Clinic

Ha et al, 2020, Developing a Telemedicine Curriculum for a Family Medicine Residency, <https://dx.doi.org/10.22454%2FPRiMER.2020.126466>



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Zwicky K, Ha E. *Telemedicine 101: Best Practices for Residents*. STFM Resource Library; Jun 3, 2020. [Accessed September 11, 2020]. <https://resourcelibrary.stfm.org/viewdocument/telemedicine-101-best-practices-fo?CommunityKey=2751b51d-483f-45e2-81de-4faced0a290a>.

[Telehealth for the internal medicine resident: A 3-year longitudinal curriculum.](#) Kirkland EB, DuBose-Morris R, Duckett A.J *Telemed Telecare*. 2021 Oct;27(9):599-605. doi: 10.1177/1357633X19896683. Epub 2019 Dec 31. PMID: 31888396





# What does the future have in store?

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**"The Integrated Care Tree of Models & Clinical Pathways Rooted In Perspectives"**

PCBH

Collaborative Care

**Models**

SBIRT

Medication Assisted  
Treatment

**Clinical Pathways**

Medical Family Therapy

Trauma Informed Care

Patient Centered Medical Home

ACEs

Chronic Disease Management

Medically Unexplained Symptoms

Triple/ Quadruple AIM

Population Health

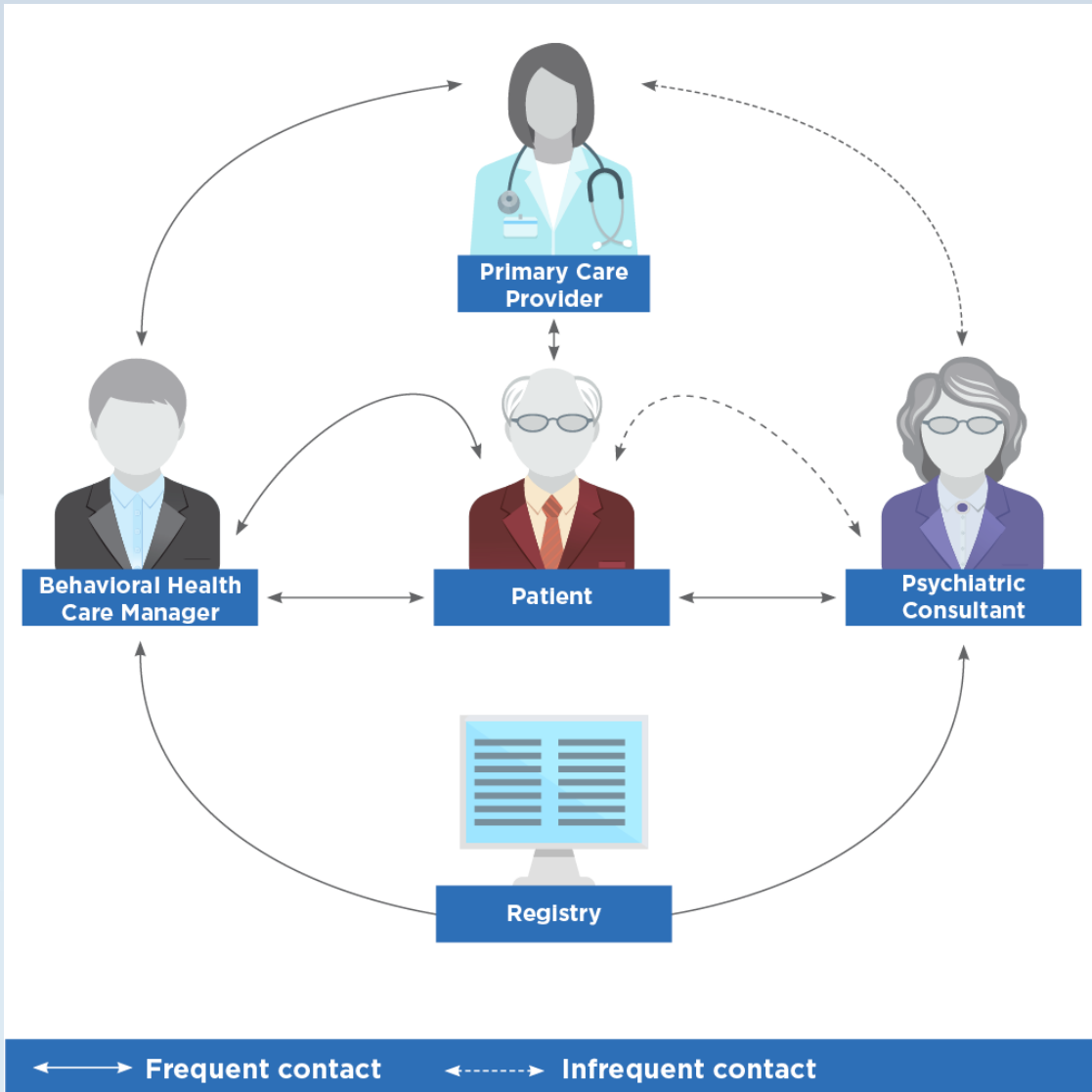
**Perspectives**

Biopsychosocial Model

Social Determinants

Health Psychology





A 2012 Cochrane Review concluded that CoCM had significant effects for improving depression and anxiety outcomes in primary care based off of 79 randomized-controlled trials (Archer et al., 2012).

### How does the Collaborative Care Model work?

The Collaborative Care Model operates through five principles including:

1. patient-centered team care
2. population-based care
3. measurement-based treatment to target
4. evidence-based care
5. accountable care.





Remote  
Patient  
Monitoring

Easy Data  
Access

**Benefits of  
an Integrated  
Healthcare  
System**

Management of  
Chronic Diseases



And let's not forget:

CULTURE  
EATS STRATEGY  
FOR BREAKFAST  
AND TECHNOLOGY  
FOR LUNCH  
AND THEN...

