

Telehealth for Rural Providers

Jonathan Neufeld, PhD - Robert Stiles, MA, MPH

August 3, 2021



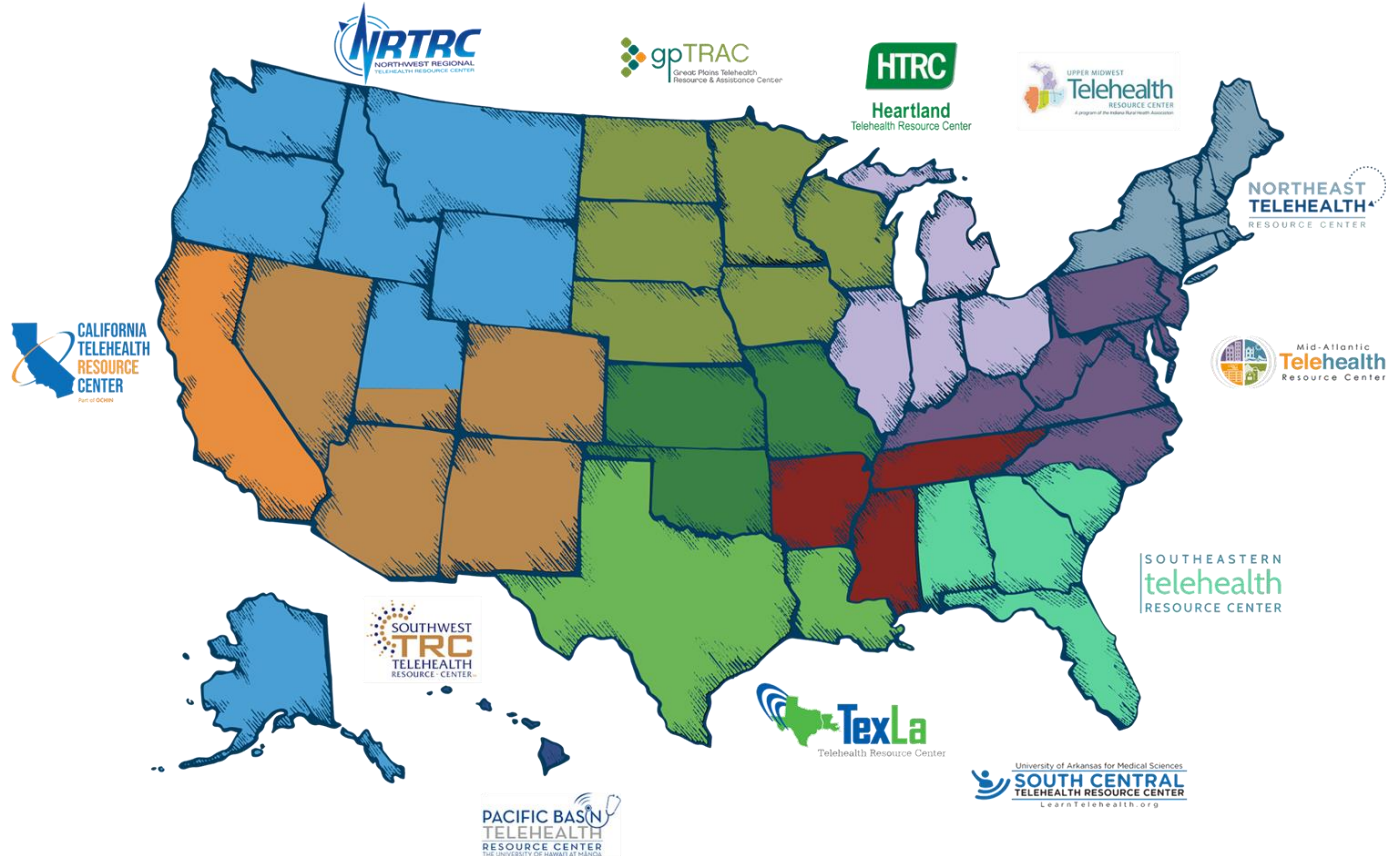
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OUTLINE

- Introduction
 - Who are the TRCs?
 - The COVID revolution
 - History & Research
- Framework and Regulatory Issues
 - Regulations and licensure
 - Pandemic flexibilities
- Logistics and Implementation
 - Mirroring workflows
 - Patient safety
 - Emergency procedures
- Service Delivery & Clinical Skills
 - Basic video skills
- Clinical Examples
- Q&A (10 minutes)

HRSA Funded Telehealth Resource Centers

www.telehealthresourcecenter.org



NRTRC	gpTRAC	NETRC
CTTRC	HTRC	UMTRC
SWTRC	SCTR	MATRC
PBTRC	TexLa	SETRC
12 REGIONAL RESOURCE CENTERS		

 TelehealthTechnology.org	 Center for Connected Health Policy The National Telehealth Policy Resource Center
2 NATIONAL RESOURCE CENTERS	



Headline from Advisory Board

How Covid-19 will impact
telehealth

**The sudden pivot from “nice-to-have” to baseline
expectation**

June 4, 2020

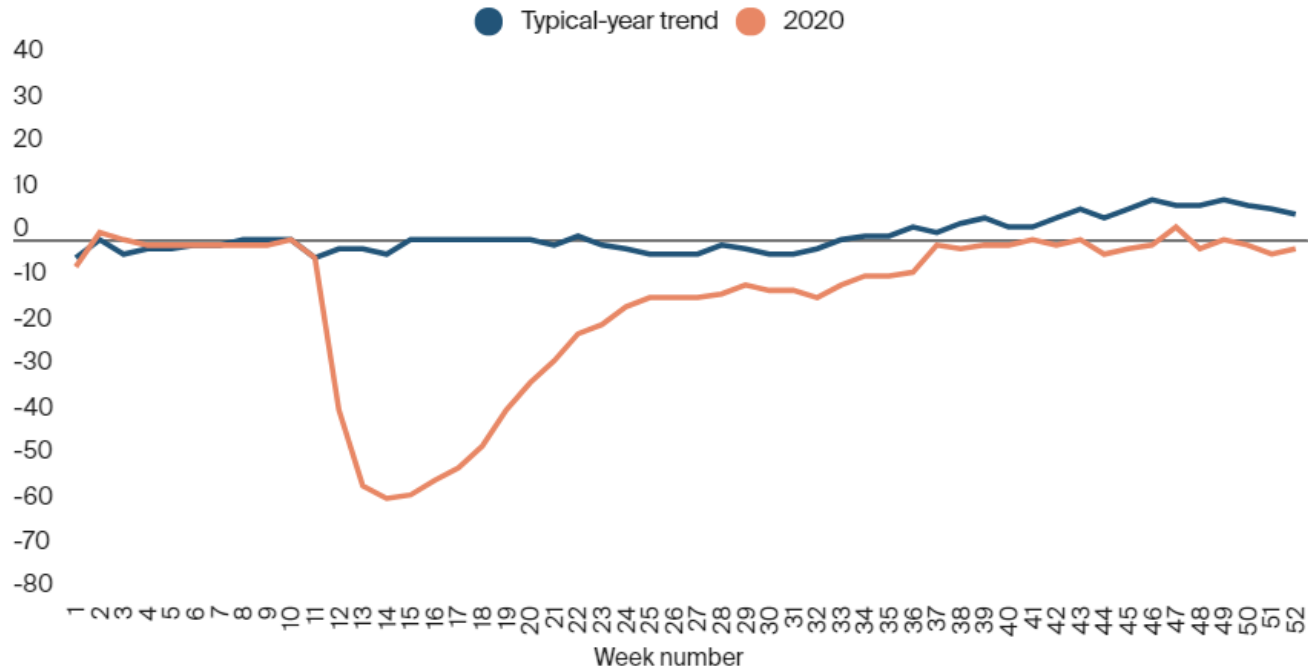
COVID-19 Pandemic Has Changed Healthcare

Telehealth, defined here as the remote consultation between the clinician and the patient regardless of technology, is no longer an attractive niche option but now a necessity for delivering timely and safe healthcare. The ability to conduct a remote evaluation protects both patients and providers at a time when physical distancing is a priority, and both parties appreciate its availability, safety, and convenience.

AHRQ Issue Brief No. 20-0040-2-EF, August 2020

Major Impact of COVID-19

Percent change in visits from baseline



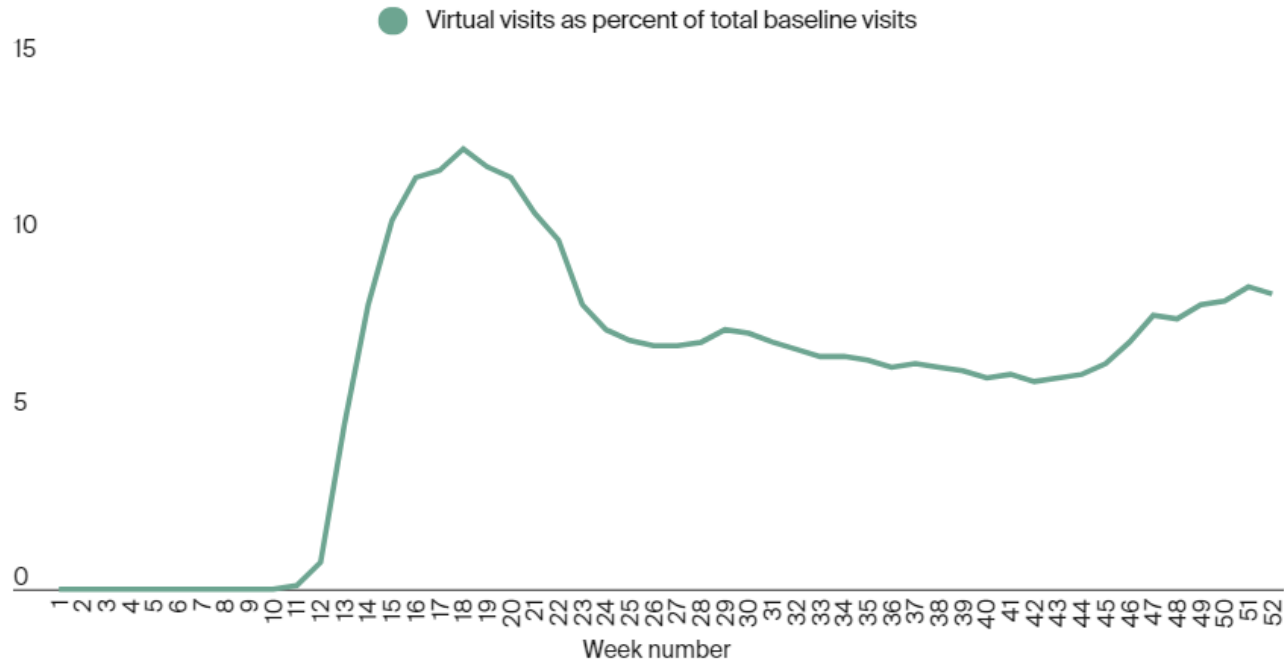
Note: Data are presented as a percentage change in the number of visits in a given week from the baseline week (Week 10, or March 1–7, 2020). “Typical year” data from 2016 to 2019 were also calculated as a percentage change from the baseline week — week 10 — in those years. Data are equally weighted across the four years.

Source: Ateev Mehrotra et al., *The Impact of COVID-19 on Outpatient Visits in 2020: Visits Remained Stable, Despite a Late Surge in Cases* (Commonwealth Fund, Feb. 2021).

<https://doi.org/10.26099/bvhf-e411>

The Rise of Virtual Visits (video and telephone)

Percent change in visits from baseline



Note: Data are presented as a percentage: the number of telemedicine visits in a given week is the numerator, while the number of visits in the baseline week (March 1–7) is the denominator. Telemedicine includes both telephone and video visits.

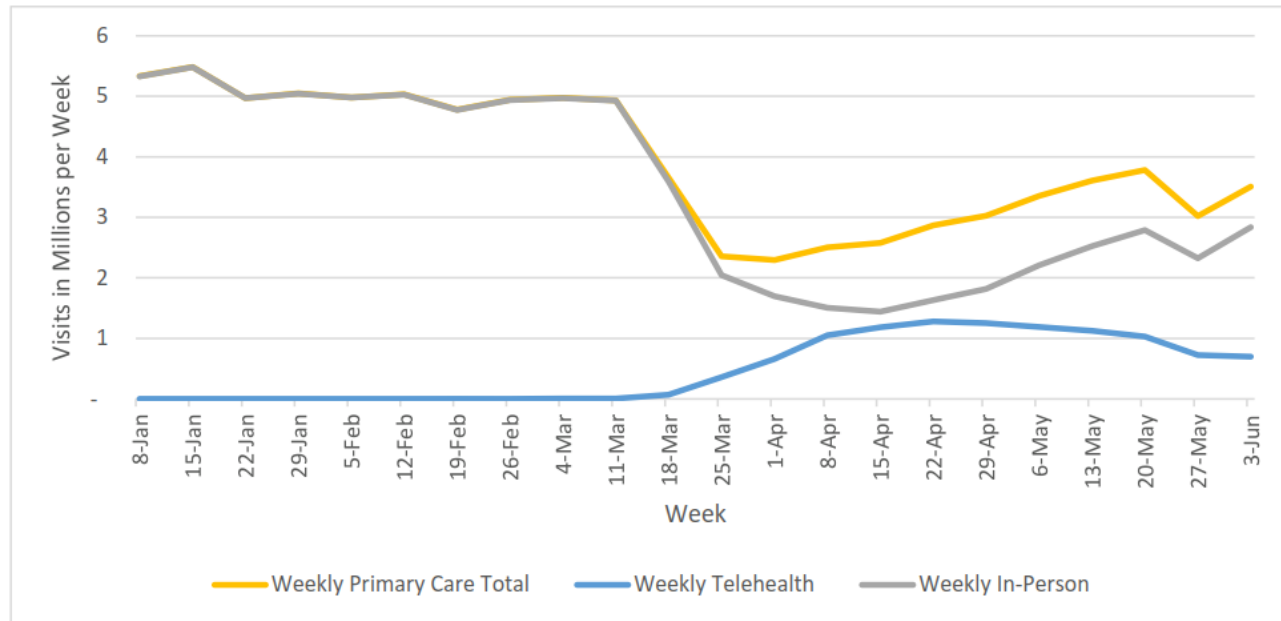
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Telehealth Partially Compensated for Lockdown

- Primary care visits plummeted in mid-March
- In-person visits bottomed out and telehealth visits peaked in April, then regressed
- Same pattern for dual enrolled and high utilizers

Figure 1. Primary Care Visits for FFS Medicare Beneficiaries (visits in millions per week)

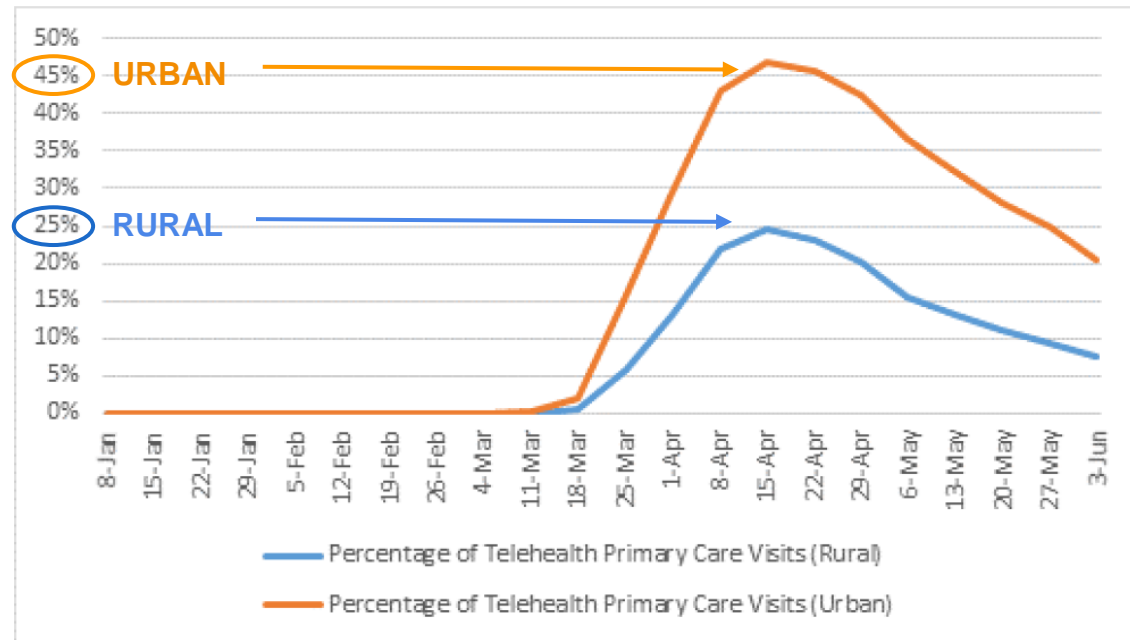


Source: Medicare claims data up to June 3rd, available as of June 16.

Telehealth Adoption Greater in URBAN Areas

- Percentage of visits via TH followed the same time pattern
- Urban TH was twice as common as rural (by percentage)

Figure 4. Telehealth Weekly Visits as a Percentage of Total FFS Medicare Primary Care Visits in Urban and Rural Counties



Source: Medicare claims data up to June 3rd, available as of June 16.

Lots of Variability - Patient Population

- Adult encounters have rebounded considerably
- Infant, child, and adolescent encounters are still significantly below normal

Percent change in visits from baseline, by age



Download data

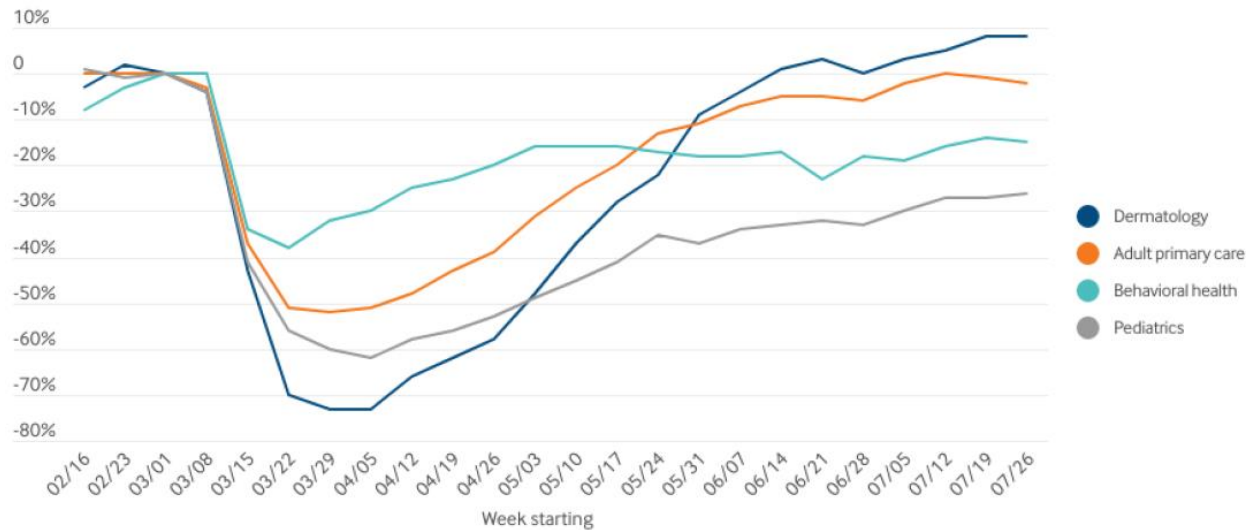
Data are presented as a percentage change in the number of visits of any type (in-person and telemedicine) in a given week from the baseline week (March 1–7).

Source: Ateev Mehrotra et al., *The Impact of the COVID-19 Pandemic on Outpatient Visits: Changing Patterns of Care in the Newest COVID-19 Hot Spots* (Commonwealth Fund, Aug. 2020). <https://doi.org/10.26099/yaqe-q550>

Lots of Variability - Specialties

- Dermatology bounced hard
- Adult Primary Care is back to pre-COVID
- Behavioral Health adjusted rapidly, but is still significantly below normal
- Pediatrics remains low

Percent change in visits from baseline, by provider specialty



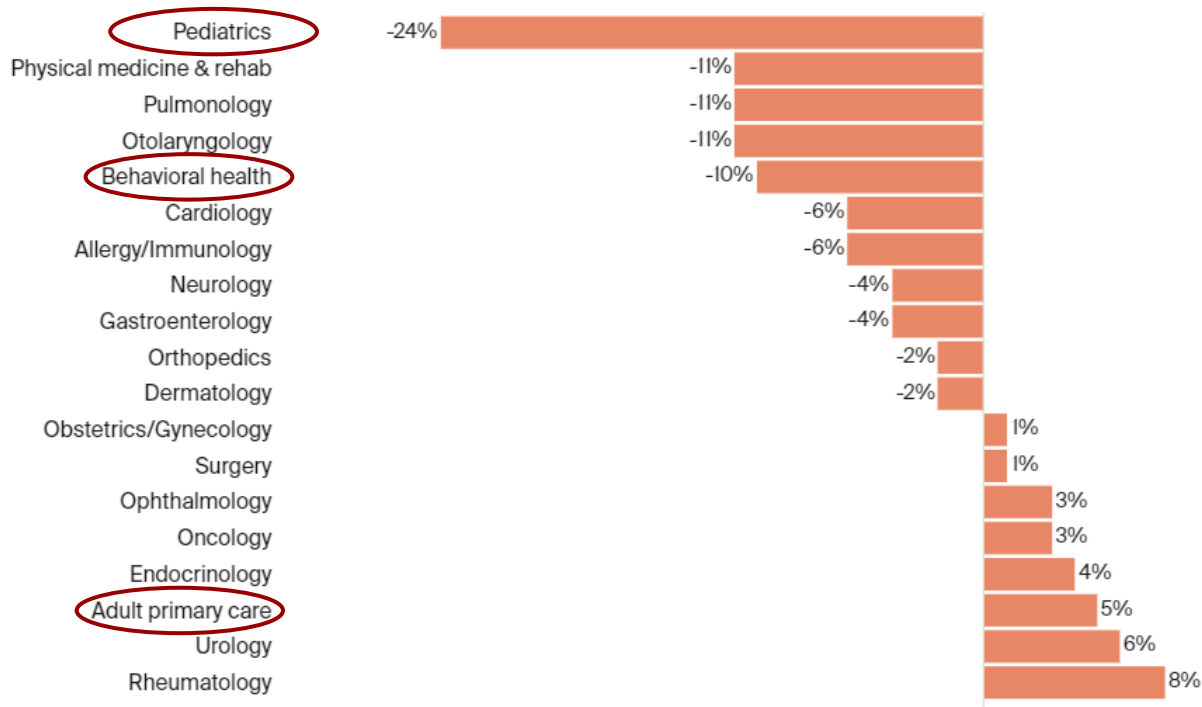
[Download data](#)

Data for only four specialty areas shown to illustrate the range of trajectories. The decline shown is reflective of all visit types (in-person and telemedicine). Visits from nurse practitioners and physician assistants are not included. Behavioral health includes psychiatrists, psychologists, and social workers. Urgent care center visits are not included in adult primary care or pediatrics.

Source: Ateev Mehrotra et al., *The Impact of the COVID-19 Pandemic on Outpatient Visits: Changing Patterns of Care in the Newest COVID-19 Hot Spots* (Commonwealth Fund, Aug. 2020). <https://doi.org/10.26099/yaqe-q550>

Volume Rebound (Recovery by Year End)

Percent change in visits from baseline, by specialty



Note: Data are for the last three full weeks in 2020 compared to the baseline week (March 1–7). We did not include weeks with holidays or the shortened week at the end of the year. Data are for the selected specialties shown only, both in-person and telemedicine. Visits from nurse practitioners and physician assistants are not included. The relative increase in some specialties compared to the baseline week may be driven by seasonal patterns. For example, in primary care, practices typically have more visits in the winter than at other times of the year.

Source: Ateev Mehrotra et al., *The Impact of COVID-19 on Outpatient Visits in 2020: Visits Remained Stable, Despite a Late Surge in Cases* (Commonwealth Fund, Feb. 2021).

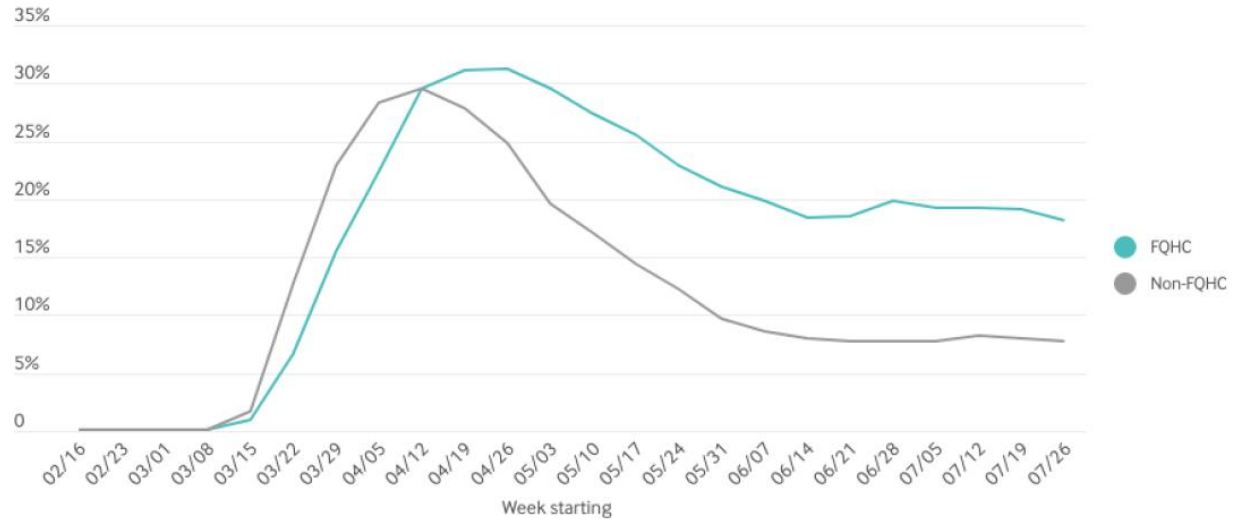
<https://doi.org/10.26099/bvvhf-e411>

Lots of Variability - Healthcare Organization Types

- FQHCs are doing more telehealth (by percentage) than other providers
~8% vs ~20%

For FQHCs (more than others), telehealth is part of the “new normal”

Fraction of all visits in a given week provided by telemedicine



[Download data](#)

Data are presented as a percentage change in the number of visits of any type (in-person and telemedicine) in a given week from the baseline week (March 1–7).

Source: Ateev Mehrotra et al., *The Impact of the COVID-19 Pandemic on Outpatient Visits: Changing Patterns of Care in the Newest COVID-19 Hot Spots* (Commonwealth Fund, Aug. 2020). <https://doi.org/10.26099/yaqe-q550>

TELEHEALTH



Early Research



Nebraska Psychiatric Institute (1959)

- Individual and group therapy

Dartmouth-Hitchcock MH Center (1968)

- Live consultation

Historical Perspective



Telediagnosis: A New Community Health Resource

Observations on the Feasibility of Telediagnosis Based on 1000 Patient Transactions

RAYMOND L. H. MURPHY, JR., M.D., Sc.D.
KENNETH T. BIRD, M.D.

By means of a two-way audiovisual microwave circuit, physicians at the Massachusetts General Hospital provided medical care to 1000 patients 2.7 miles away at the Logan International Airport Medical Station. This study reports on this service which demonstrates that telediagnosis can increase the availability of quality medical care.

Introduction

For many years two-way voice communication has been used for emergency advice to patients in remote areas. This kind of telediagnosis has been limited because it is difficult to verbalize much of the important information required for medical diagnosis.

The demand for medical care in rural areas is increasing. It is widely recognized that medical practice has become more specialized and that, of necessity, specialists must practice in areas of high population density. Thus, it is likely that the many benefits of specialized medical care will not be readily available to persons in remote areas if current health care methods are employed.

With these considerations in mind we explored the

feasibility of diagnosis at a distance using two-way closed circuit television and other electronic devices. The purpose of this report is to comment on the experience obtained while delivering primary medical care to 1000 patients via this telediagnosis system. Details of the nature and costs of the required equipment will be the subject of a future communication.

The Logan International Airport Medical Station of the Massachusetts General Hospital in East Boston was chosen as the site for this experiment. This station was established to provide occupational health services to airport employees and to deliver emergency care and medical direction to travelers. During this experiment the Medical Station was staffed by nurses 24 hr per day, supplemented by in-person physician attendance during the 4 hr coincident with peak passenger flow periods. Since the inception of the Medical Station, nurse-clinicians have been responsible for the evaluation and treatment of patients who visit this facility when physicians are not in attendance. To assist the nurse in this task, she had the ready availability of physician consultation by telephone. It was thus logical to superimpose on this situation a visual communications system to study this new method of health care delivery. The

This study was supported in part by U.S. Public Health Service Project CH23-41A6 entitled "Telediagnosis: A New Community Health Resource." Address reprint requests to: Dr. Raymond L. H. Murphy, Jr., Asst. Clinical Professor of Occupational Medicine, Department of Physiology, Harvard School of Public Health, 665 Huntington Ave., Boston, Massachusetts 02115. Dr. Bird is with the Medical Service, Massachusetts General Hospital, Boston, Massachusetts.



Great Plains Telehealth
Resource & Assistance Center

Change Happens



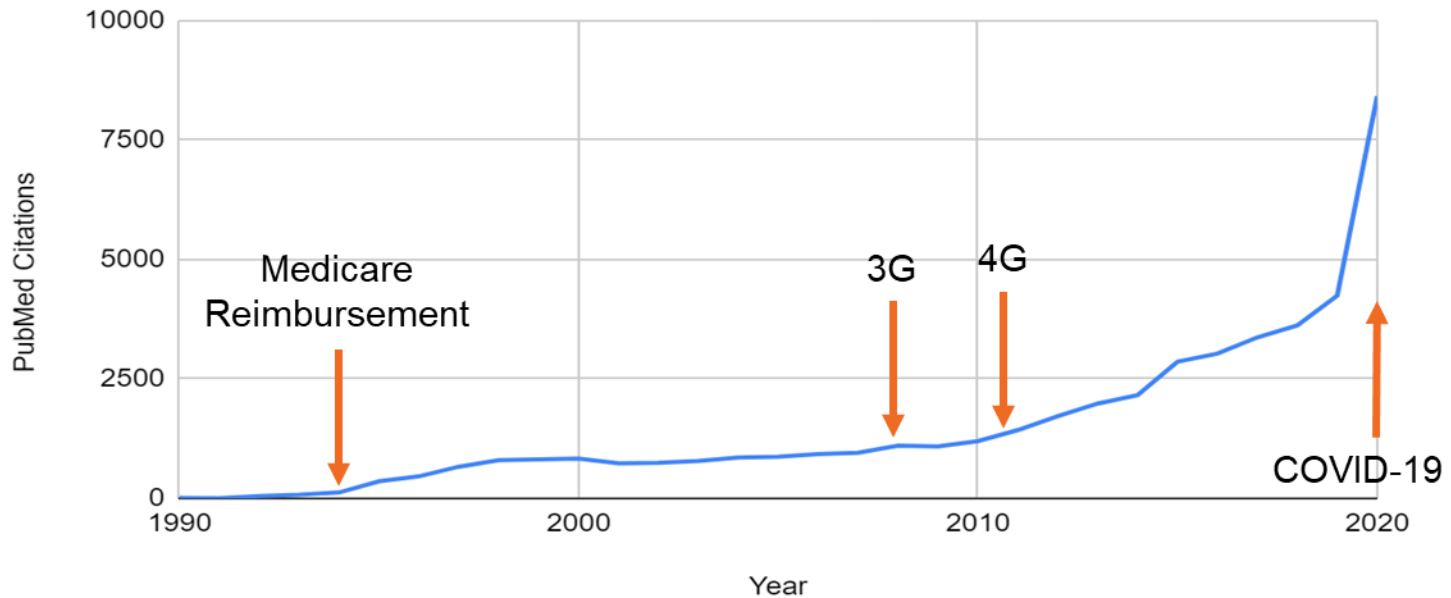
Subsequent Eras

- **1996/2000** - Medicare reimbursement
- **2000s** - Relatively widespread university research/service programs
 - Focus on bringing specialty care to rural/underserved areas
- **2010s** - Multiple factors converged
 - Broadband became better and more widely available
 - Coding/decoding algorithms improved significantly (internet video standards)
 - Equipment became generic (cheaper and more reliable)
 - Inexpensive and easily managed web-based platforms became available
 - Primary care explored bringing services “in-house,” contracting providers
- **2020 - COVID-19**
 - Stay-at-home orders force providers to develop DTC services
 - Regulations and reimbursement policies altered to support this

Research Growth

PubMed Citations

telemedicine OR telehealth OR telemental OR telebehavioral



Research - Main Findings

- When telehealth meets patient access needs, patients love it (high satisfaction)
- Treatment outcomes are indistinguishable from in-person care (note: providers make sure treatments succeed and “unreasonable” studies aren’t done)
- Telehealth can be used to save time, travel, and money

Consensus Findings:

- Telehealth is more appropriate in some situations than others (though no specific patient or treatment group has been definitively “ruled out”)
- Professional and ethical standards still apply, but with some new implications



Legal & Policy Framework

Definition: Behavioral Health vs Mental Health

“Behavioral Health” is a term that encompasses services for both:

- Mental health
- Substance use

We use the term “Behavioral Health” to refer to the entire domain of mental health and substance use care/services.

Four Domains of Telehealth

- **Hospital & Specialty Care**
 - Specialists see and manage patients remotely
- **Integrated Primary Care**
 - Specialists (often MH) integrate services into primary care environment
- **Remote Monitoring for Transitions and Maintenance**
 - Physiological and behavioral monitoring to maintain best function in least restrictive, least expensive, or most preferred environment
- **Direct to Consumer Services (Primary/Urgent Care)**
 - Convenient access to needed/desired services; popular among younger, busier, and generally healthier patients

Four Technologies of Telehealth

- **Live Video**
 - Real time (synchronous), interactive
- **Asynchronous Messaging (Secure Texting)**
 - “Store and forward” technologies, text messages, secure email
- **Remote Physiological Monitoring**
 - Physiological devices and behavioral monitoring tools; may be connected to the provider’s office directly or via a third party (vendor)
- **Mobile Health (mHealth)**
 - Cell phones and smartphone-connected devices of various kinds

**“Audio only” =
telephone**

Conceptual Framework

TELEMEDICINE IS A DELIVERY MECHANISM, NOT A SERVICE

- Providers need no new certification or credentials
 - Some state boards are considering adding requirements -- keep informed
- All ethical guidelines and regulations that apply to your professional work apply equally to your work in the domain of telehealth

Regulatory Environment - Federal

FEDERAL REGULATIONS

- All federal legislation covering healthcare
- Prescribing Controlled Substances (Ryan Haight Act)
 - In person visit required before prescribing controlled substances (or use consultation model)
 - Telemedicine exemption (undefined)
- Medicare conditions of payment (reimbursement)

Medicare Reimbursement Changes

PFS - 2021

- Expanded list of covered services
- Expanded list of provider types
- MH: In-person every 6 months
- RHC payment limit increase and hospice payments
- No location limits (urban/home OK)
- Audio-only coverage for all
- FQHC/RHC distant (pro-fee) billing

PFS - 2022

- [Continue Top 4 from 2021]
- No location limits for BH
- Audio-only for MH (video capable)
- FQHC/RHC TBH equivalence
- TCM/CCM/CoCM concurrence

Regulatory Environment - State

STATE REGULATIONS

- Licensing Boards (many are silent regarding telehealth)
- State laws/regulations regarding healthcare
- Medicaid (reimbursement)
- Commercial payer regulations (reimbursement)

State Regulatory Changes

STATE REGULATIONS

- Licensing Boards - some new requirements to provide guidelines
- New definitions of TH and disciplines allowed to use TH
- Medicaid (reimbursement)
 - Remote monitoring
 - Audio only
- Commercial payer regulations (reimbursement)
 - Coverage parity
 - Parity (or not) for “audio only” services

YMMV!! Check with your regional TRC or other information source.

Telemedicine Billing Guide

COVID-19 Virtual Visit & Reimbursement Guide - Iowa

- Prepared by RuralMed
- Updated monthly (or as needed) through September, 2021

https://www.gptrac.org/file_download/fa91efc1-4410-49b7-9f3a-d2ca84627069

<https://www.gptrac.org/states/>



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Brought to you by:



Partnered with:



Fee Schedules & Payor Matrices

- Fees and billing procedures have stabilized
- Full spectrum of services covered at all locations
- Current policies good through December 2021 or end of PHE

MEDICARE ALLOWABLE Common Medicare Telehealth			
CPT	Allowable	CPT	Allowable
99201	F: \$25.04 NF: \$42.75	99212	F: \$24.38 NF: \$42.43
99202	F: \$47.91 NF: \$71.21	99213	F: \$48.93 NF: \$70.58
99203	F: \$71.90 NF: \$101.10	99214	F: \$75.57 NF: \$102.80
99204	F: \$123.03 NF: \$154.85	99215	F: \$106.85 NF: \$138.34
99205	F: \$160.83 NF: \$195.94	99307	\$42.03
99211	F: \$8.89 NF: \$21.69	99308	\$65.96

E-Visit, Virtual Check-In, and Telephone Codes							
CPT	Allowable	CPT	Allowable	CPT	Allowable	CPT	Allowable
99421	F: \$12.50 NF: \$14.47	99423	F: \$40.50 NF: \$46.40	G2062	F: N/A NF: \$20.67	G2010	F: \$8.89 NF: \$11.52
99422	F: \$25.43 NF: \$28.71	G2061	F: N/A NF: \$11.75	G2063	F: \$32.09 NF: \$32.42	G2012	F: \$12.50 NF: \$13.82
99441	F: \$24.38 NF: \$42.43	99442	F: \$48.93 NF: \$70.58	99443	F: \$75.57 NF: \$102.80	98966	F: \$12.50 NF: \$13.49
98967	F: \$24.78 NF: \$26.09	98968	F: \$37.18 NF: \$38.49				

PAYOR MATRIX				
PAYOR	E-VISIT	TELEHEALTH-NO ORIGINATING SITE RESTRICTION	VIRTUAL CHECK-IN	TELEPHONE
AETNA	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: New or Established Billing: 99421-99423, 98970-98972, G2061-G2063	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: New or Established Billing: Telehealth Eligible Code Professional: Modifier GT (CMS CPTs) or 95 (Appendix P CPTs) w/ POS 02 Facility: Modifier GT or 95	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: Established Only Billing: G2010, G2012	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: Established Only Billing: 99441-99443, 98966-98968
CIGNA	NOT ALLOWABLE	ALLOWABLE Coverage: Effective: New Guidelines-January 1 st , 2021 Patient Type: New or Established Patients Billing: Telehealth Eligible Code Professional: Modifier 95 or GT & POS used for in-person visit. Facility: Not Allowable	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: Established Only Billing: G2012 Note coverage will end April 20 th , 2021	ALLOWABLE Coverage: Effective: January 1 st , 2021 Patient Type: Established Only Billing: 99441-99443
MEDICA [®] "Excludes MNCP Members"	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: Established Only Billing: 99421-99423, 98970-98972, G2061-G2063	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: Not Specified Billing: Telehealth Eligible Code Professional: Modifier GT (CMS CPTs) or 95 (Appendix P CPTs) & POS 02 Facility: Modifier GT or 95 COVID-19 Related: CS Modifier	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: Established Only Billing: G2010, G2012	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: Established Only Billing: 99441-99443, 98966-98968
MEDICARE	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: New & Established Billing: CPT 99421-99423, HCPCS G2061-G2063, RHC: G0071	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: New & Established Billing: Telehealth Eligible Code Professional: Modifier 95 w/ POS used for in-person visit. Facility: PN or PC modifier w/ DR condition code. Method II: Modifier GT. RHC: G2025 w/ CO & 95. Facility PTOTBT: Modifier 95COVID-19 Related: CS Modifier	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: New & Established Billing: HCPCS G2010, G2012, G2250-G2252 RHC: G0071	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: New & Established Billing: 99441-99443, 98966-98968 w/ modifier 95 RHC: G2025
IOWA MEDICAID	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: New or Established Billing: 99421-99423	ALLOWABLE Coverage: Effective: March 13 th , 2020 Patient Type: New or Established Billing: Code on provider's fee schedule. Professional: POS 02 w/ modifier 95 Facility: Modifier 95	ALLOWABLE Coverage: Effective: March 6 th 2020 Patient Type: Established Billing: HCPCS G2010, G2012	ALLOWABLE Coverage: Always Covered Patient Type: Established Billing: 99441-99443
WELLMARK BCBS	ALLOWABLE Coverage: Effective: Not Specified Patient Type: Established Only Billing: 99421-99423, G2061-G2063	ALLOWABLE Coverage: Effective: March 16 th 2020 Patient Type: Not Specified Billing: Telehealth Eligible Code Professional: POS 02 Facility: Modifier GT w/ telehealth comment	ALLOWABLE Coverage: Effective: Not Specified Patient Type: Established Only Billing: G2010, G2012	ALLOWABLE Coverage: Effective: Not Specified Patient Type: Established Only Billing: 99441-99443, 98966-98968
UHC COMMERCIAL	ALLOWABLE Coverage: Always Covered Patient Type: CPT Code Specific Billing: CPT 99421-99423, 98970-98972	ALLOWABLE Coverage: Effective: New Guidelines-01/01/21 Patient Type: CPT Code Specific Billing: Telehealth Eligible Code Professional: 02	ALLOWABLE Coverage: New Guidelines-01/01/21 Patient Type: CPT Code Specific Billing: HCPCS G2010, G2012, G2250-G2252	CONDITIONAL Check contracted fee schedule to see if telephone codes are allowable



Great Plains Telehealth
Resource & Assistance

F=Service Performed in Facility Setting. P=Service Performed in a Non-Facility Setting (physician's office)

Changing Conventions

Shifting Definitions of Telemedicine

- Telemedicine has almost always been defined as “live interactive video”
- Asynchronous (“store and forward”) telemedicine is generally regulated as a separate service (only covered in a few states/plans)
- Telephone, fax, and email ~~were~~ (almost always) excluded
- Direct-to-consumer (DTC) services are growing FAST

**** Almost every provider is doing some DTC (D2P, P2P) service now ****

Pandemic-driven “Leveling”

In order to enable healthcare services to continue during the pandemic, MANY regulatory and reimbursement flexibilities were implemented. These changes led to:

- Increased availability of telehealth services generally
- “Leveling” the field so most states and payers provided similar coverages (at least temporarily)

MOST telehealth services delivered during the pandemic took advantage of one or more of these regulatory flexibilities.

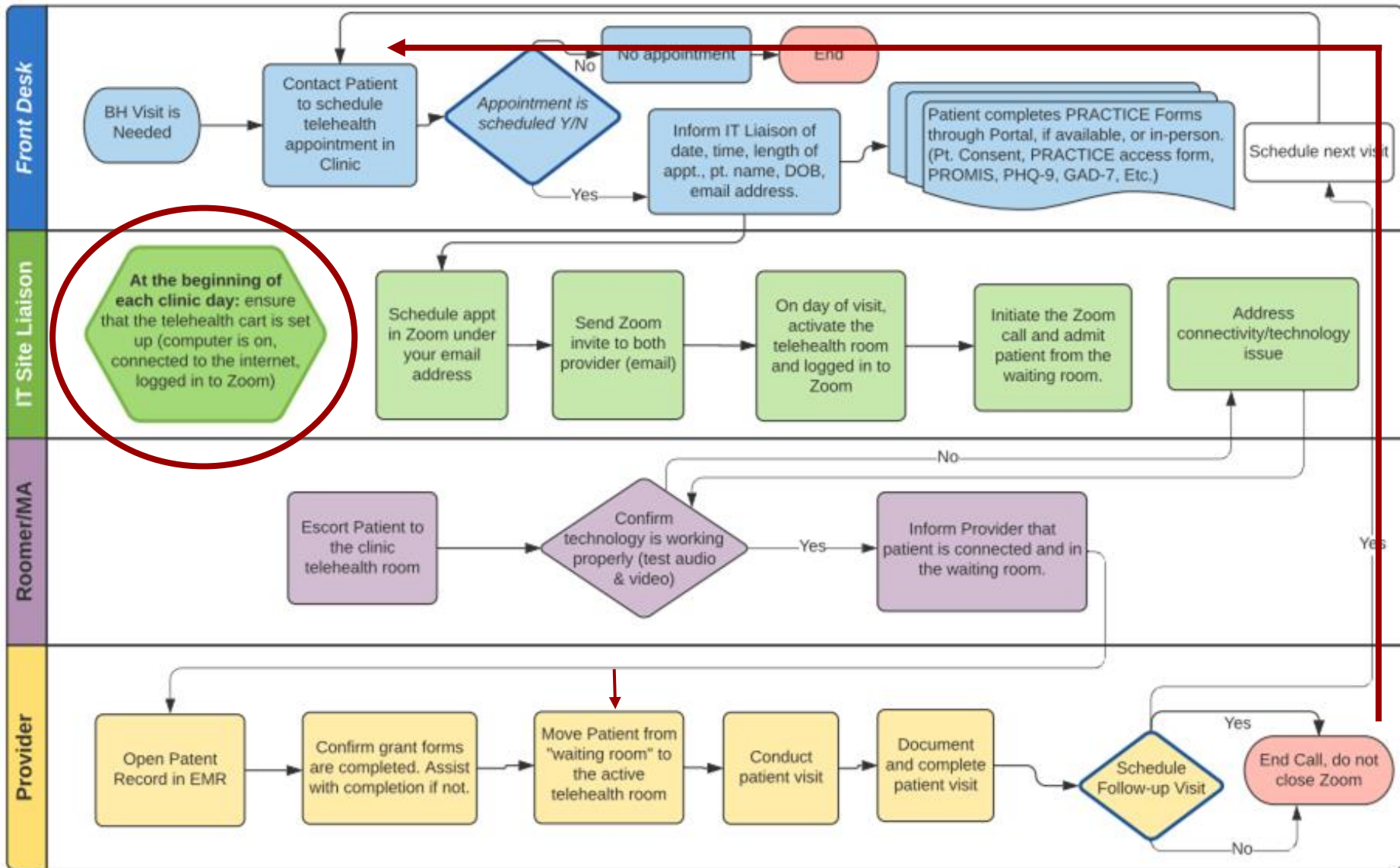
Temporary rules are starting to be rescinded at the state and federal levels.



Clinical Practices & Workflows

Workflow Analysis

1. Include everyone meaningfully involved (scheduling, rooming, support, etc.)
2. Include each person, and be sure each person is connected to the process
3. Pay attention to decision points (forks, branches) and handoffs
 - a. Include all significant forks/branches
4. Call out separately any tasks done “daily” or “at the start of each clinic”
5. Include closing/ending/recycling instructions



Emergency Procedures

As part of the consent/initial session:

- Discuss emergency procedures and any foreseeable risks
- Collect numbers for local fire, police, and other emergency contacts

In an emergency situation:

- Maintain contact and work to transfer care to appropriate onsite responders and/or caregivers
- Document the event and the transfer of care
- Make any mandated reports

Use of Scripts (Standardization)

1. Hello [pt]. Can you see and hear me clearly? [Adjust for lighting, sound.]
2. As you know, I'm [Provider]. Can you confirm your name and date of birth for me, please?
3. Can you confirm your location, please?
4. Are you in a private place? Is anyone else in the room or within earshot?
5. Do you have any questions about the privacy of this call or anything else before we begin?
6. If we get disconnected, please reconnect using the same link. If that fails, I will call you at _____. Is that the correct number?



Service Delivery - Clinical Skills

First rule of live video:

HIGH QUALITY BANDWIDTH!

Minimum bandwidth: Consistent 1-3 Mbps
(same as for a good Netflix experience).

For some rural areas, this is still a
significant problem.

Shared circuits clog up during busy times.



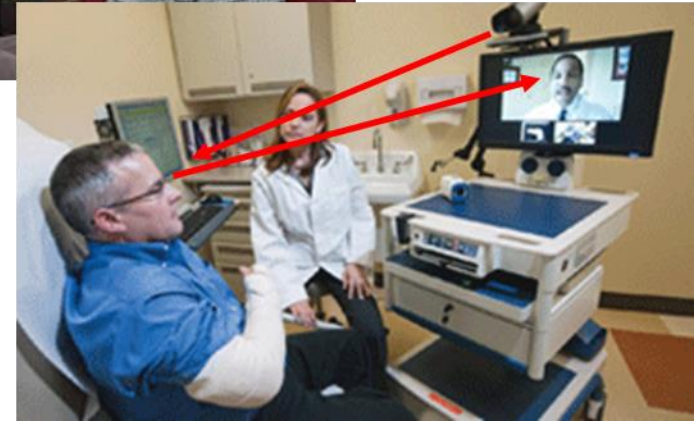
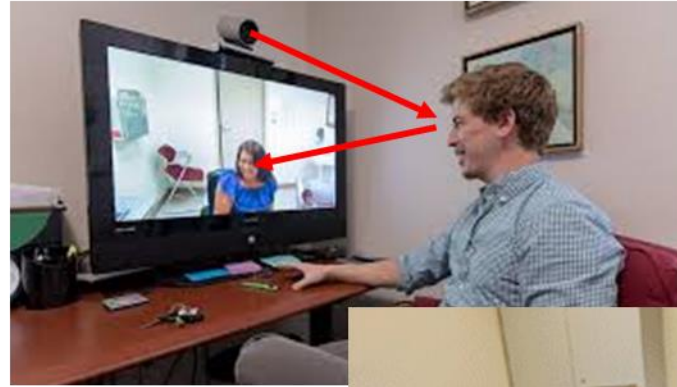
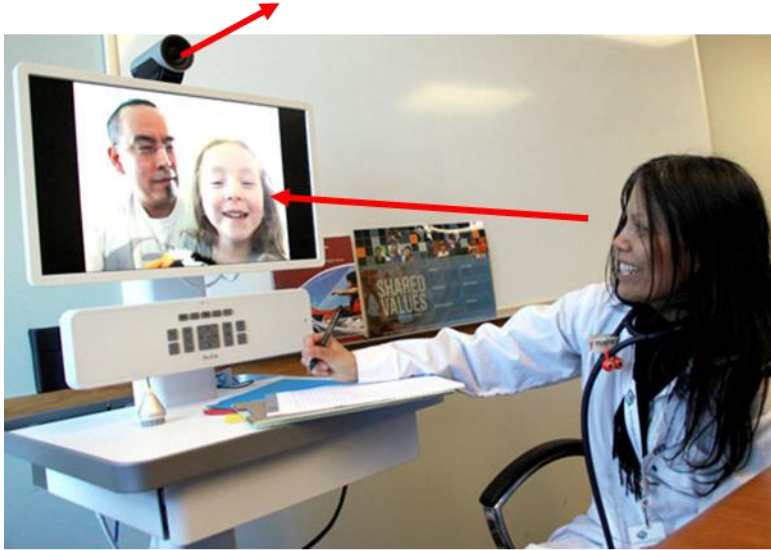
Camera Location and Framing for “Eye Contact”

- Producing the illusion of “eye contact”
 - a. Camera directly over face
 - b. Video image directly under the camera
 - c. Minimize the separation

**“Lower the camera;
raise the image”**



Camera Location and Framing for “Eye Contact” (continued)



“Presence” on Camera

- Fill the frame to the top
- Include your hands
- Use a muted background
- Avoid distractions in the frame
- Avoid backlighting



Contact



Jonathan Neufeld, PhD

jneufeld@umn.edu

(574) 606-5038

Mary DeVany, MS

medevany@umn.edu

(888) 239-7092

<http://gptrac.org>

<http://telehealthresourcecenters.org>