

ARIZONA
TELEMEDICINE
PROGRAM



Virtual Primary Care

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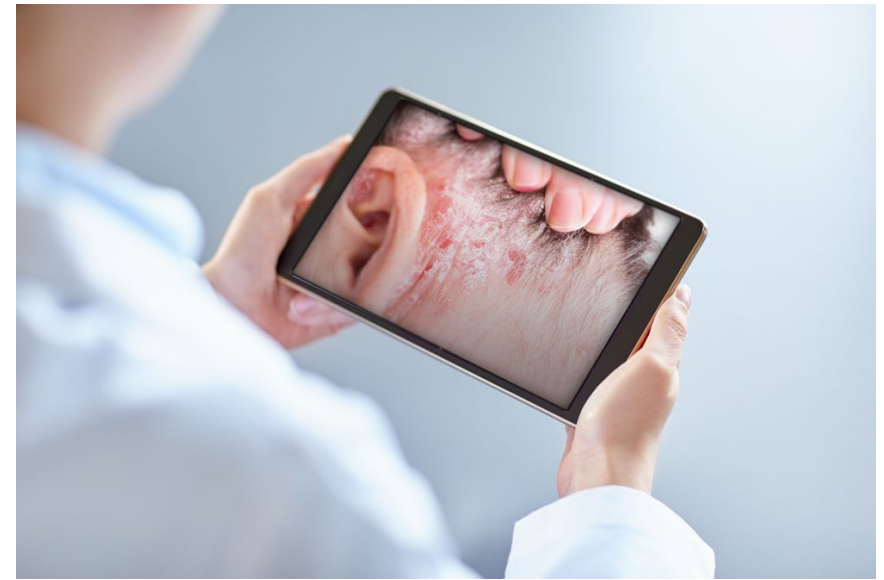
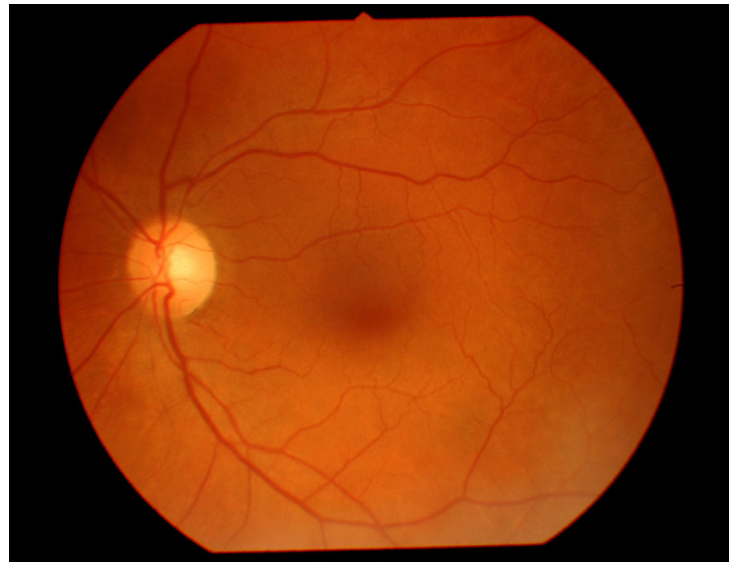


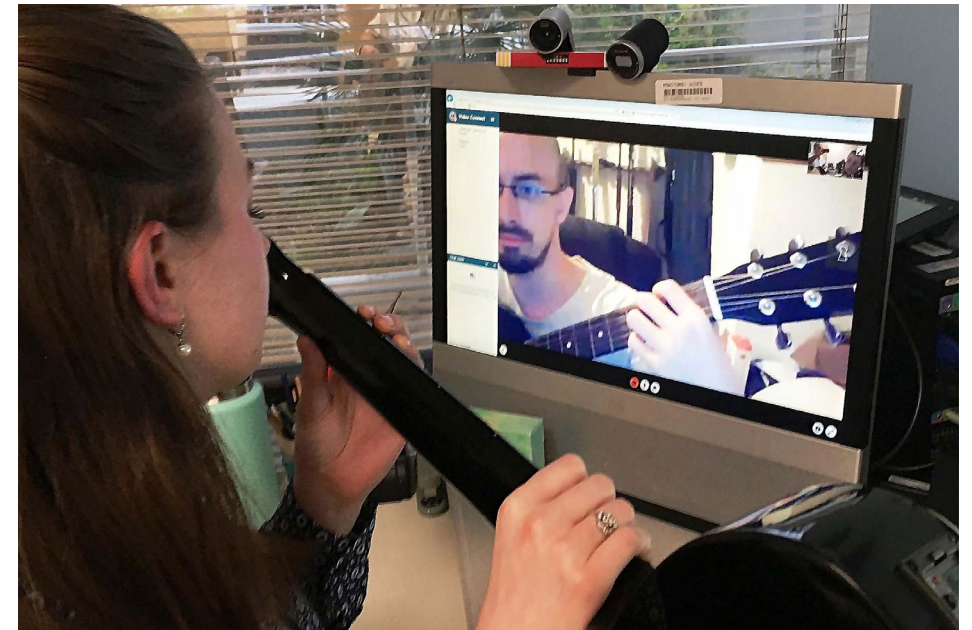
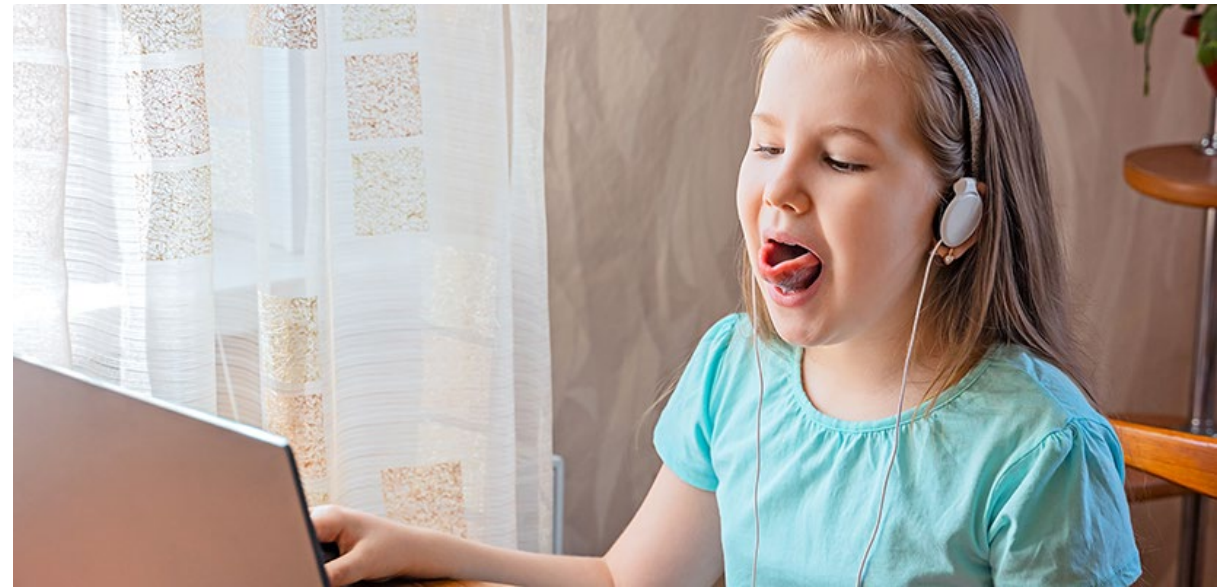
Learning Objectives

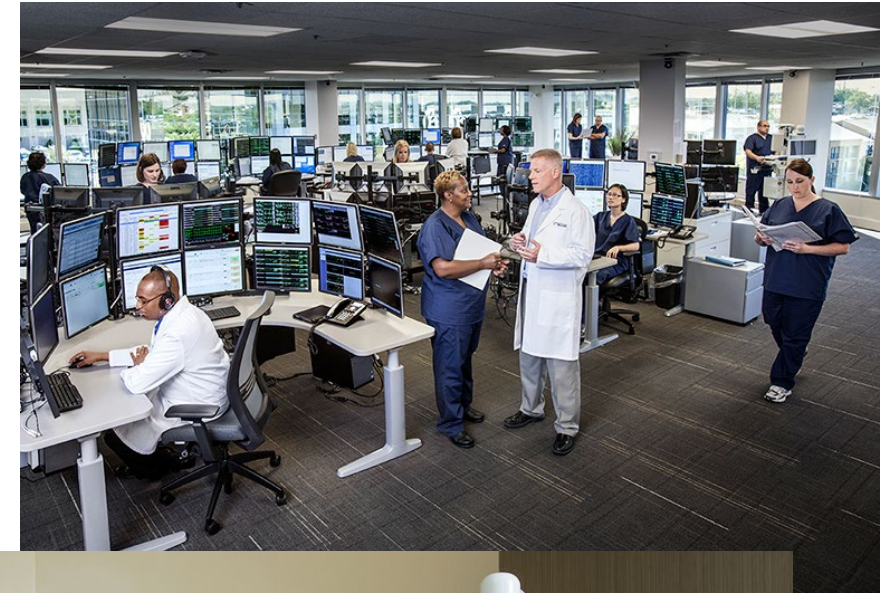
- Define what virtual primary care is & what visit looks like for patient
- Recall data & evidence related to effectiveness virtual primary care
- ID opportunities & challenges virtual primary care for rural health providers
- Describe how COVID affecting & may affect virtual primary care as service line
- Recognize new non-traditional competitors to rural hospitals using virtual health services
- Give examples of Flex Program support for telehealth efforts in rural hospitals & clinics

What is Telemedicine/Telehealth/Virtual Care?

- Use electronic information & telecommunications technologies to support long-distance clinical health care, patient & professional health-related education, public health & health administration using videoconferencing, internet, store-forward imaging, streaming media, terrestrial & wireless communications
- Telehealth refers to *broader scope of remote healthcare services* including remote non-clinical services, such as provider training, administrative meetings, continuing medical education in addition to clinical services



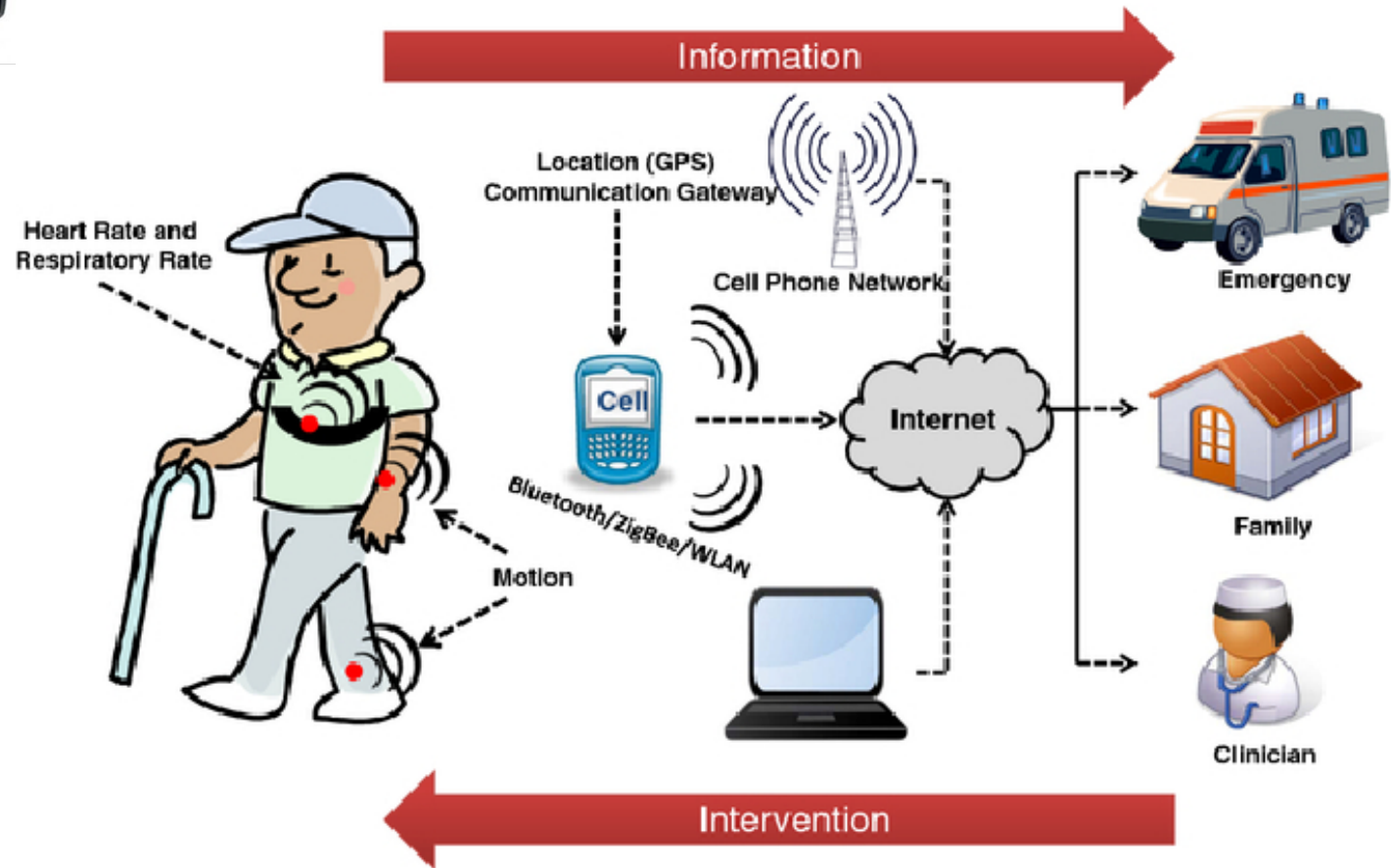
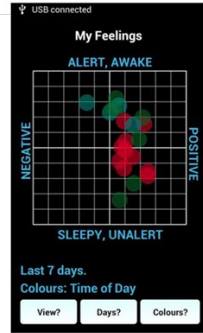
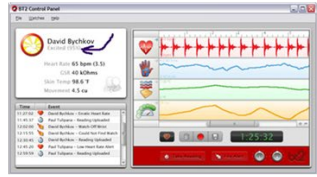








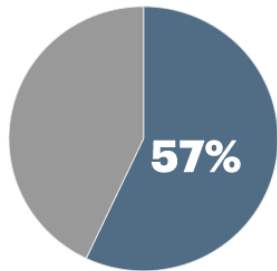
WEARABLE/USABLE DEVICES



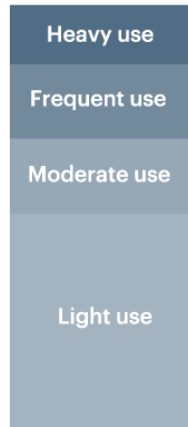
Telehealth becomes the first line of treatment for a majority of US patient care amid Covid-19

Frontline providers

Share of frontline providers using at least some telehealth

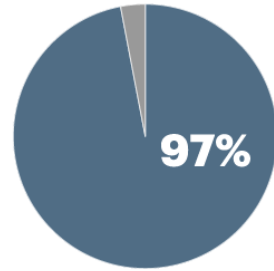


Share of patient care conducted via telehealth



Primary care physicians

Share of PCPs using at least some telehealth



Share of patient care conducted via telehealth



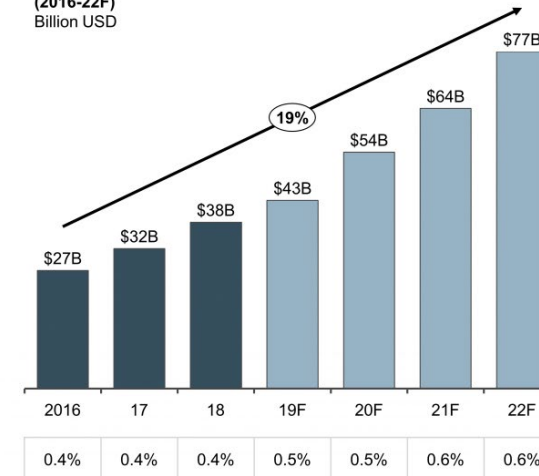
Note: Percentages for time spent on telehealth as follows: Light use (11% 25% of patient care), moderate (26% 50%), frequent (51% 75%), heavy (76% 100%)
Source: Frontline of US Healthcare Survey, April 8-13 (n=304), 60% frontline providers (emergency, ICU, infectious disease, hospitalists), 40% primary care physicians and other specialists

BAIN & COMPANY

Before COVID-19, telemedicine had been growing at around 19% per year and it was expected to continue this trajectory

Telemedicine global revenue
(2016-22F)
Billion USD

Forecast before COVID-19

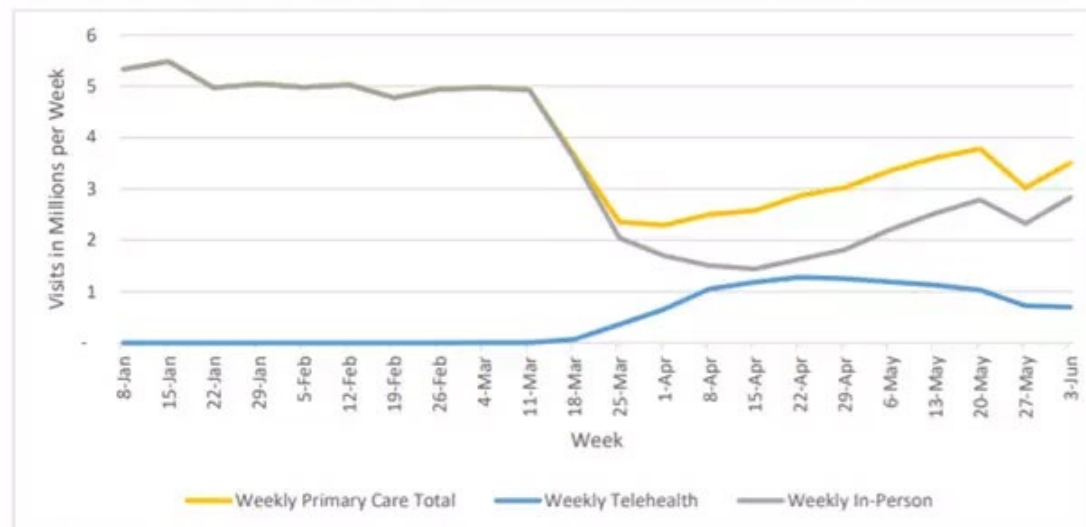


- In 2018, the global healthcare market* reached USD 8.5 trillion, and it is expected to grow at a compound annual growth rate (CAGR) of 9% by 2022
- Telemedicine has been growing at 2x that rate even before the pandemic, and growth is widely expected to accelerate now

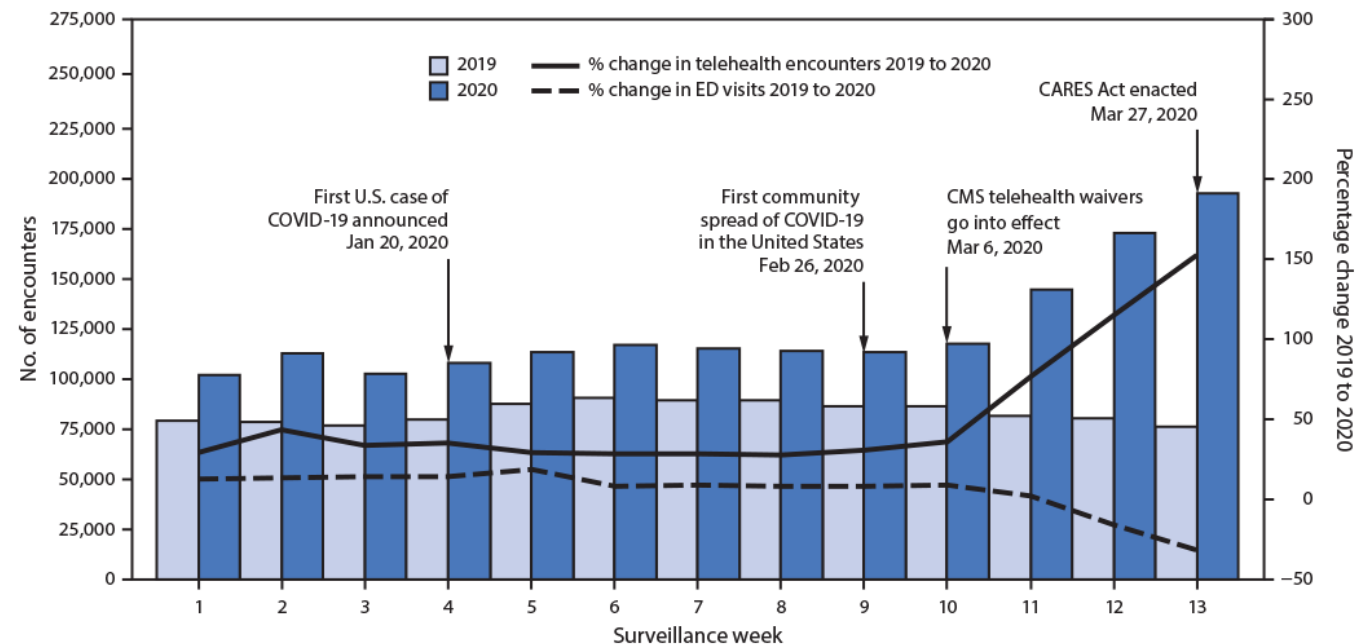
*Annual global healthcare market data extrapolated from 2018 values, and estimated CAGR for the 2016-18 and 2018-22 periods
Source: Business Research Company; Business Wire

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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.



Walmart Buys MeMD To Expand Telehealth Effort Nationwide

Healthcare has never been more convenient

At Amazon Care, healthcare is built around you and your family. Here, your needs, time, schedule and loved ones come first.

Get started with Teams for healthcare organizations

Publix spokesman: Telemedicine kiosks in grocery stores 'a game-changer'

Telehealth

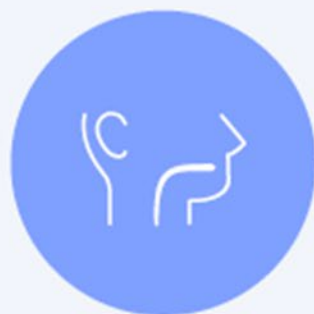
When you're sick and don't want to leave home, MinuteClinic® now offers two options for affordable video-based care treating adults and children over age 2. Compare them here.

Live your healthiest life

At Google Health, we want to help everyone live more life every day through products and services that connect and bring meaning to health information.

Walgreens Expands Telehealth Platform to Offer Virtual Doctor Visits Through MDLIVE via Walgreens Mobile App

Q: What types of conditions would you seek telemedicine treatment for?



48%

ALLERGY, EAR
NOSE THROAT



45%

ROUTINE
PREVENTIVE VISIT



45%

MENTAL / BEHAVIORAL HEALTH /
COUNSELING / THERAPY

34%

COVID-19
screening

30%

GI / stomach-related
issue

29%

Pain management /
regenerative
medicine

25%

Arthritis
(rheumatology)

24%

Dermatologic or
cosmetic surgery
consultation

22%

Eye-related
issue

19%

Physical /
occupational therapy

19%

Respiratory
issue

19%

Urgent care

15%

Pediatric
care

13%

Heart-related
(cardiology) issue

12%

Oral / dental
care

Q: Which factors would help you decide to make a telemedicine appointment?



69%

**EASY-TO-USE
TECHNOLOGY**



57%

**COMMUNICATION THAT
TELEMEDICINE SERVICES
ARE AVAILABLE**



47%

**ONLINE
SCHEDULING
OPTIONS**



47%

**IMMEDIATE
AVAILABILITY**



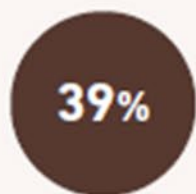
Understanding
how my insurance
covers
telemedicine



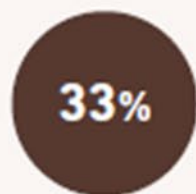
A secure
communication
platform that
protects my privacy



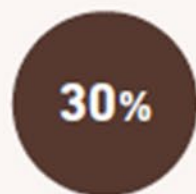
Reading reviews from
other patients about
their telemedicine
experience



The ability to see
the same
provider in a
practice



Information on what
types of services
can be provided via
telemedicine



Credentials and
expertise of the
physician /
healthcare provider

Practice Guidelines for Live, On Demand Primary and Urgent Care

December 2014



Practice Guidelines for Live, On Demand Primary and Urgent Care

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Condition	Telemedicine Appropriate	
	Video	Telephone Only*
Routine Conditions That Are Appropriate For Telemedicine Management		
Acid Reflux	Yes	Yes
Acute Conjunctivitis (e.g., uncomplicated viral or allergic)	No	Yes
Allergic rhinitis	Yes	Yes
Anxiety and Depression	Yes	Yes
Assessment of minor wounds	No	Yes
Burns (e.g., minor, sunburn)	No	Yes
Common rashes (e.g., contact dermatitis, shingles)	No	Yes
Constipation	Yes	Yes
Diabetes management (routine and follow-up)	Yes	Yes
Influenza (uncomplicated)	Yes	Yes
Sinusitis (uncomplicated)	Yes	Yes
Skin Infections	No	Yes
Smoking Cessation	Yes	Yes
Upper Respiratory Infections (uncomplicated)	Yes	Yes
Urinary tract infections (uncomplicated in non-pregnant women and in the absence of vaginitis)	Yes	Yes
Weight management	Yes	Yes

Conditions That May Be Appropriate for Telemedicine Management		
Asthma	No	Yes
Bronchitis (mild symptoms, pneumonia not suspected)	Yes	Yes
Essential Hypertension	Yes	Yes
Migraine headache (diagnosis established, uncomplicated)	Yes	Yes
Musculoskeletal issues muscle strains and joint sprains	No	Yes
Pain control (mild to moderate for known conditions)**	Yes	Yes
Rash (generalized without fever or systemic symptoms)	No	Yes
Viral gastroenteritis (uncomplicated)	Yes	Yes

Conditions That Are NOT Appropriate For Telemedicine Management***		
Acute abdominal pain	No	No
Acute neurologic symptoms	No	No
Altered mental status and inability to communicate history or symptoms	No	No
Anaphylaxis or severe allergic reaction	No	No
Chest pain	No	No
Diarrhea and vomiting (severe and with at least moderate dehydration)	No	No
Immune-compromised patient in which condition poses significant added risk	No	No
Procedure required for treatment	No	No
Rash (disseminated with fever and systemic symptoms)	No	No
Acute, or chronic shortness of breath	No	No
Trauma (moderate to severe of one or multiple sites)	No	No
UTI or kidney stone (complicated)	No	No
Vision disturbance due to eye trauma, peri-orbital infection	No	No

Annual Wellness Visits Via Telemedicine

- **Allows care teams proactively engage patients**
- **Identifies & meets care needs before become acute enough to require patient access an in-person healthcare setting**
- **Assists identifying & counseling on risky health behaviors**
- **Provides opportunity remind/schedule screening exams**
- **Creates opportunity care teams identify patients who would benefit from Chronic Care Management (CCM) which is especially important during periods of shelter-in-place orders Providers should clearly document visit & any limitations in medical record**
- **Use professional judgement/experience to determine how TM best utilized**

Peds Well Visits Via Telemedicine

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EYES

- Appearance of conjunctiva and lids (lid droop, crusting/exudate, conjunctival injection)
- Appearance of pupils (equal, round, extraocular eye movements)
- Assessment of vision (seeing double)



NECK

- External appearance of the neck (overall appearance, symmetry, tracheal position, gross evidence of lymphadenopathy, jugular venous distention)
- Gross movement (degrees of flexion anterior, posterior and laterally)



RESPIRATORY

- Assessment of respiratory effort (intercostal retractions, use of accessory muscles, diaphragmatic movement, pursed lip breathing, speaking in full sentences or limited due to shortness of breath)
- Audible wheezing
- Presence and nature of cough (frequent, occasional, wet, dry, coarse)
- Determine Roth Score¹



CARDIOVASCULAR

- Presence and nature of edema in extremities (pitting, weeping)
 - Capillary refill
 - Temperature of extremities per patient/other measure
- CONSTITUTIONAL**
- Vital signs (heart rate and respiratory rate; if available, temperature, blood pressure, weight)
 - General appearance (ill/well appearing, (un) comfortable, fatigued, attentive, distracted, disheveled/unkept)



CHEST

- Inspection of the breasts (symmetry, nipple discharge)
- Chest wall or costochondral tenderness with self-palpation



ABDOMEN

- Examination of the abdomen
- Tenderness on self-palpation or palpation by attendant
- Observation of patient jumping up and down



MUSCULOSKELETAL

- Examination of gait and station (stands with/without use of arms to push off chair; steady gait, broad/narrowed based)
- Inspection of digits and nails (capillary refill, clubbing, cyanosis, inflammatory conditions, petechiae, pallor)
- Extremity exam may include:
 - Alignment, symmetry, defects, tenderness on self-palpation
 - Range of motion, pain, contracture
 - Muscle strength and tone (flaccid, cogwheel, spastic), atrophy, abnormal movements
 - Presence and nature of edema, temperature
- Self-Assessment using [Ottawa ankle and knee rules](#)



SKIN

- Rashes, lesions, ulcers, cracking, fissures, mottling, petechiae
- Cyanosis, diaphoresis



NEUROLOGIC

- Dermatomal distribution of numbness or pain
- Examination of sensation (by touch or pin)



PSYCHIATRIC

- Orientation to time, place, and person
- Recent and remote memory
- Mood and affect
- Pressured speech
- Mood lability (crying, laughing)



¹ Roth score should be used only during telehealth visits, and in conjunction with a comprehensive assessment. This is not a reliable indicator of hypoxia.

Suggested Citation:

Showalter, G. (2020, April 14). Telehealth Physical Exam. Loengard, A., Findley, J. (Eds.). <https://caravanhealth.com/>

CaravanHealth.com

NSR-008-20200414-APP | © 2020 Caravan Health, Inc.

Constitutional

- Vitals (ex. temp, weight, RR, HR, BP) (if parent/patient can obtain these or if provider can count respirations)
- General appearance of patient (no acute distress, sitting comfortably, etc.)

Eyes

- No eye injection, no eyelid swelling, no icterus
- No eye discharge
- EOMI

Ears, nose, mouth and throat

- Normocephalic
- Mucus membranes moist, no lip cracking
- No nasal drainage
- OP – no exudate on tongue, no tonsillar enlargement, no petechiae on palate

Neck

- Range of motion, suppleness

CV

- No pedal edema (if able to observe on video)
- Capillary refill, cyanosis

Respiratory

- No retractions, no nasal flaring, overall work of breathing
- No audible wheezing, stridor, cough

GI

- Nondistended abdomen
- Nontender per parent exam
- Pain with jumping

Male GU

- Normal un-/circumcised penis without rashes or discharge
- Scrotum – no visible erythema or swelling
- No CVA tenderness per parent/patient exam*

Female GU

- External genitalia – no skin lesions, no rashes, no visible discharge
- No CVA tenderness per parent/patient exam*

Musculoskeletal

- Normal gait
- Digits – no clubbing, no cyanosis
- Moving all extremities well, good/symmetric strength throughout
- Specific joint – full/limited ROM, deformity

Skin

- No rashes, bruising or other skin lesions
- No visible edema
- OK to have parent send photos

Neuro

- Cranial nerves are intact as per the following exam: II-vision grossly normal, PERRLA, III/IV/VI- EOMI, VII-hearing grossly normal, V-clench jaw, VII- raise eyebrows bilaterally; smile/frown intact and symmetric, able to bar teeth and puff out cheeks, XII- Able to protrude tongue and move it side to side, IX/X- swallow intact; says "Ah"
- Rapidly alternating movements: no dysidiadochokinesis
- Gait: forward, toe, heel and tandem all normal
- Pronator drift: none
- Romberg: negative
- Rises from a seated position without difficulty or limitation
- Overall mental status/alertness

Psych

- Affect: euthymic, sad, anxious, fearful, angry, cheerful, appropriate/inappropriate
- Cooperativeness: cooperative, friendly, reluctant, hostile











	Step 1: Vital Signs -Weight, blood pressure, pulse, oxygen saturation, temperature
	Step 2: Skin assessment -New bruises, rash, swelling
	Step 3: Head, Eyes, Ears, Nose, and Throat -Assess vision, hearing, sense of smell; observe throat, swallowing
	Step 4: Neck -Assess pain with rotation, jugular venous distension, Corrigan's pulse
	Step 5: Lungs -Deeply inhale and hold; observe wheezing and tachypnea
	Step 6: Heart -Assess pulse; incorporate data from wearables
	Step 7: Abdomen -Assess if abdomen is firm, tender, or distended
	Step 8: Extremities -Press thumb into pre-tibial area and assess edema; perceived temperature
	Step 9: Neurological -Speech, gait, Romberg, stand from seated position
	Step 10: Social Determinants of Health -Diet, physical activity, sleep, stress, housing, transportation, safety, mood

Figure Ten-step checklist for a patient-assisted physical examination.

Am J Med. 2021 Jan; 134(1): 48–51.

Published online 2020 Jul 18. doi: [10.1016/j.amjmed.2020.06.015](https://doi.org/10.1016/j.amjmed.2020.06.015)

PMCID: PMC7368154

PMID: [32687813](https://pubmed.ncbi.nlm.nih.gov/32687813/)

The Telehealth Ten: A Guide for a Patient-Assisted Virtual Physical Examination

[Catherine P. Benziger](#), MD, MPH,^{a,*} [Mark D. Huffman](#), MD, MPH,^b [Ranya N. Sweis](#), MD, MS,^b and [Neil J. Stone](#), MD^b

AAMC TH Competencies



- ***Domain I: Patient Safety and Appropriate Use of Telehealth***
- ***Domain II: Access and Equity in Telehealth***
- ***Domain III: Communication via Telehealth***
- ***Domain IV: Data Collection and Assessment via Telehealth***
- ***Domain V: Technology for Telehealth***
- ***Domain VI: Ethical Practices and Legal Requirements for Telehealth***
- **Free download**

https://store.aamc.org/downloadable/download/sample/sample_id/412/



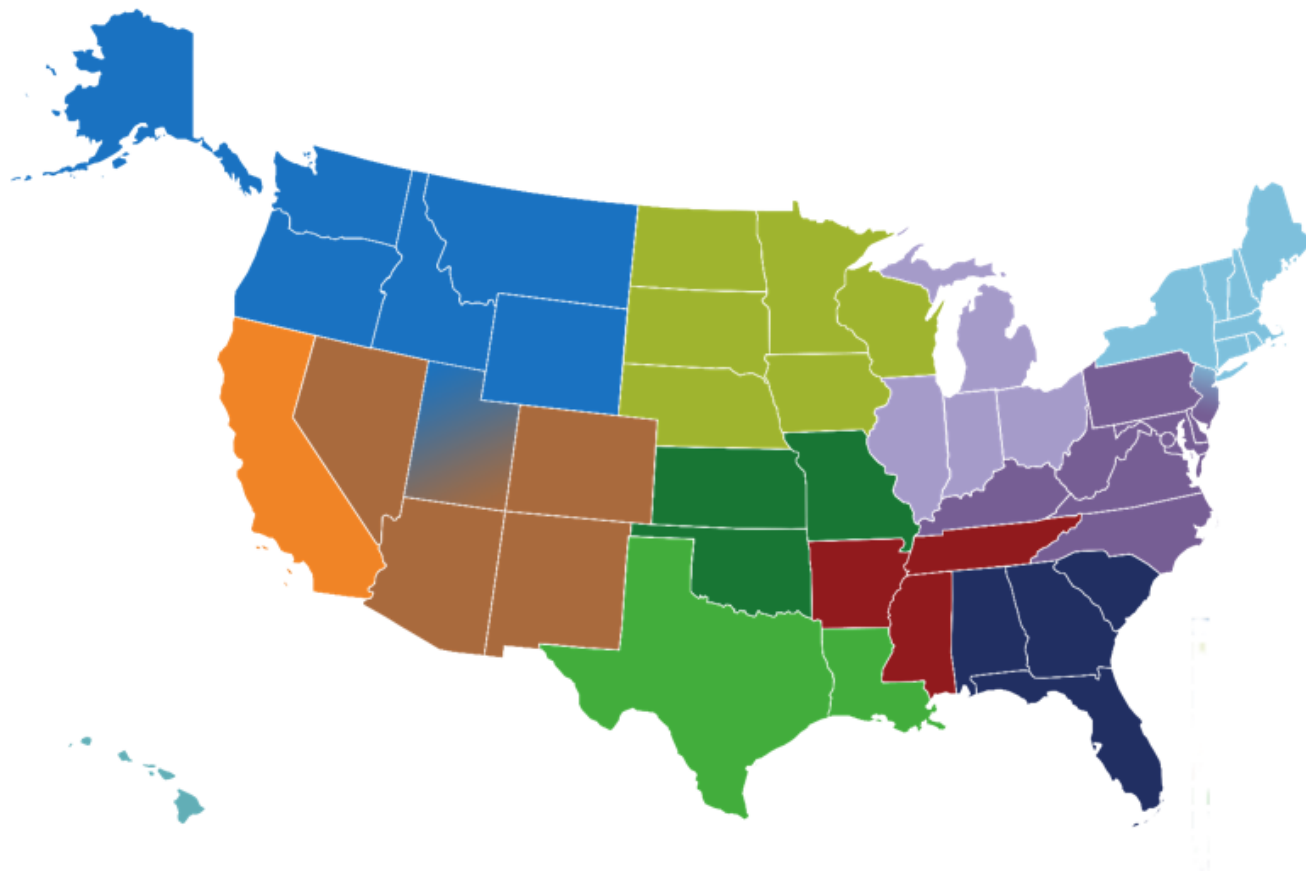
Regionals



Nationals



Funded by the U.S. Health Resources and Services Administration (HRSA) The National Consortium of Telehealth Resource Centers (NCTRC) consists of 14 Telehealth Resource Centers (TRCs). As a consortium, the TRCs have an unparalleled amount of resources available to help virtual programs across the nation, especially within rural communities. Each TRC is staffed with telehealth experts to who are available to provide guidance and answer questions. As telehealth continues to gain more visibility and recognition in healthcare, the TRCs will remain positioned to provide assistance for all.



<https://telehealthresourcecenter.org/>

Summary

- **Telemedicine is here to stay & will impact not only those directly involved in patient care but broader community as whole**
 - **Some waivers, codes & TH expansions during COVID will remain, but others will sunset**
- **Every specialty is/will be using telemedicine to some degree & providers will require infrastructure & support to effectively & efficiently deliver high quality care**
- **We need to start training future workforce to truly realize full potential of telemedicine & have integrated seamlessly into our healthcare systems, homes & lives**

Thank You!!



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