University of California
San Francisco

Can telehealth improve access?

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Health Literacy in Action Conference
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Disclosures

- None

	Real-time "Synchronous"	Store and Forward "Asynchronous"
Visits (Provider to Patient)	**Virtual Visits** *Real-time video interaction between MD and patient* Follow up visits to patient in a home or outpatient office	***e*Visits** *Online exchange of medical information between MD & patient* A tool generally used for chronic care management and medication adjustments
Consults (Provider to Provider)	**Virtual Consults** *Real-time interaction between MD to patient's MD* New or follow up consult for a patient located in a facility (ED, ICU, post-acute care)	***e*Consults & Second Opinions** *eConsults: Online exchange of medical information between MDs* Lower complexity medical opinion *Second Opinions: Online exchange of medical information between MDs* High complexity medical opinion with extensive record review

Schwamm et al. NPJ Digital Medicine. 2020

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Growing patient preference ensures ...
healio.com

Patient experience is evolving as ...
healthcareitnews.com

Patient Ed and Telehealth Opportunities ...
healthwise.org

Delivering more care remotely will be ...
aamc.org

A Patient's Guide to Telemedicine: What ...
himss.org

20 takeaways from Health Affairs ...
mobihealthnews.com

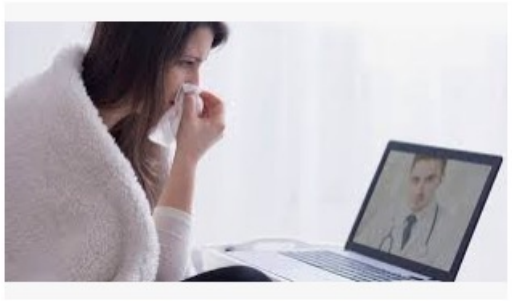
How Telehealth Impacts Patient Care
arcare.net

Telehealth as home healthcare ...
athenahealth.com

82% of consumers do not use telehealth ...
medcitynews.com

Coronavirus fuels explosive growth in ...
gcn.com

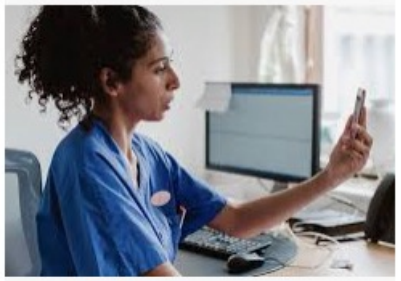
Industry Voices—When the COVID-...
fiercehealthcare.com



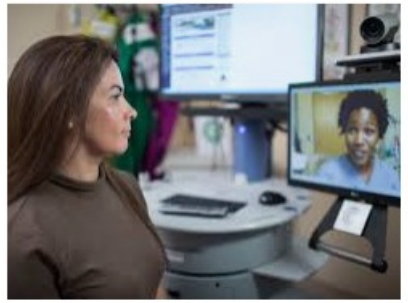
Telemedicine and Telehealth in 2019 ...
solvhealth.com

Patients overwhelm telehealth services ...
statnews.com

From telehealth visits to digital ...
fiercehealthcare.com



Telemedicine benefits, disadvantages ...
medicalnewstoday.com



What Is Telehealth? | Telehealth VA
telehealth.va.gov

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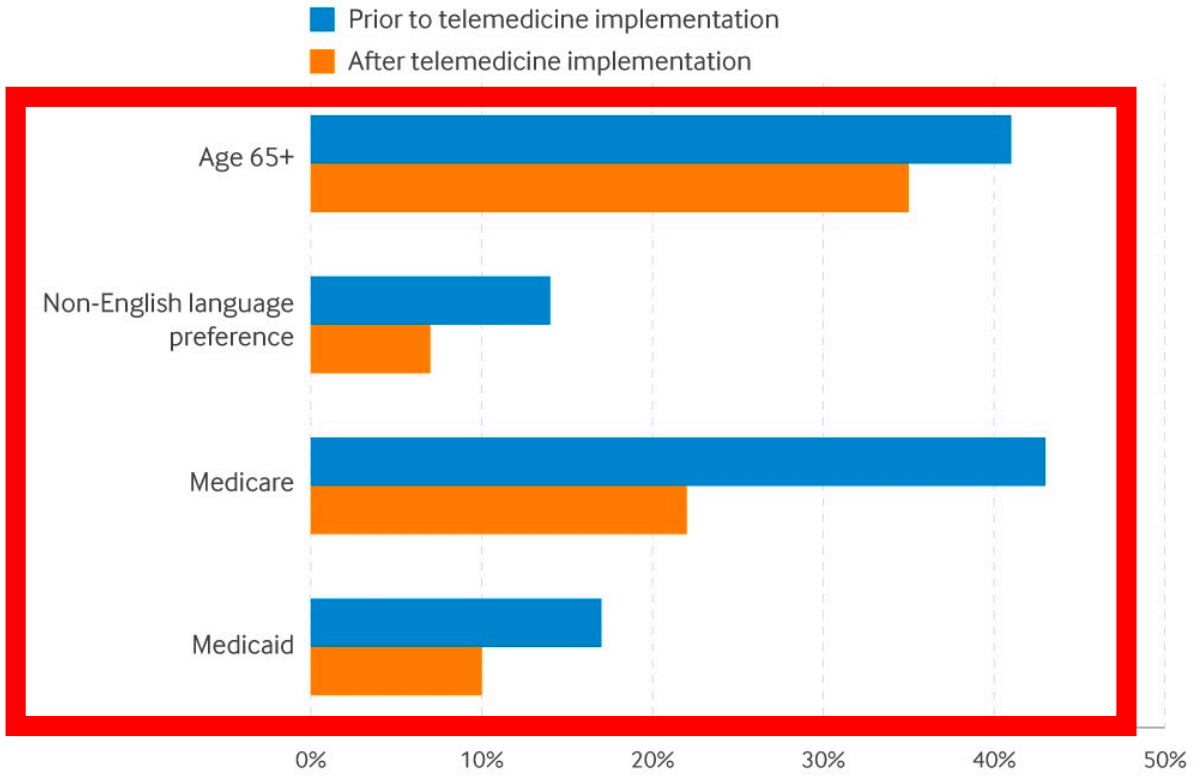
Patient Visits by Age, Language, and Insurance Before and After Telemedicine Scale-Up

This chart shows the proportion of patient visits seen by age, language preference, and insurance type prior to (2/17–2/28/2020) and after (3/23–4/3/2020) scaled-up telemedicine implementation to address the Covid-19 pandemic at the UCSF General Internal Medicine Primary Care Practice (P=0.002 for age ≥65 and P<0.001 for other comparisons). A significantly smaller proportion of visits after scaled-up telemedicine implementation were with vulnerable patients.

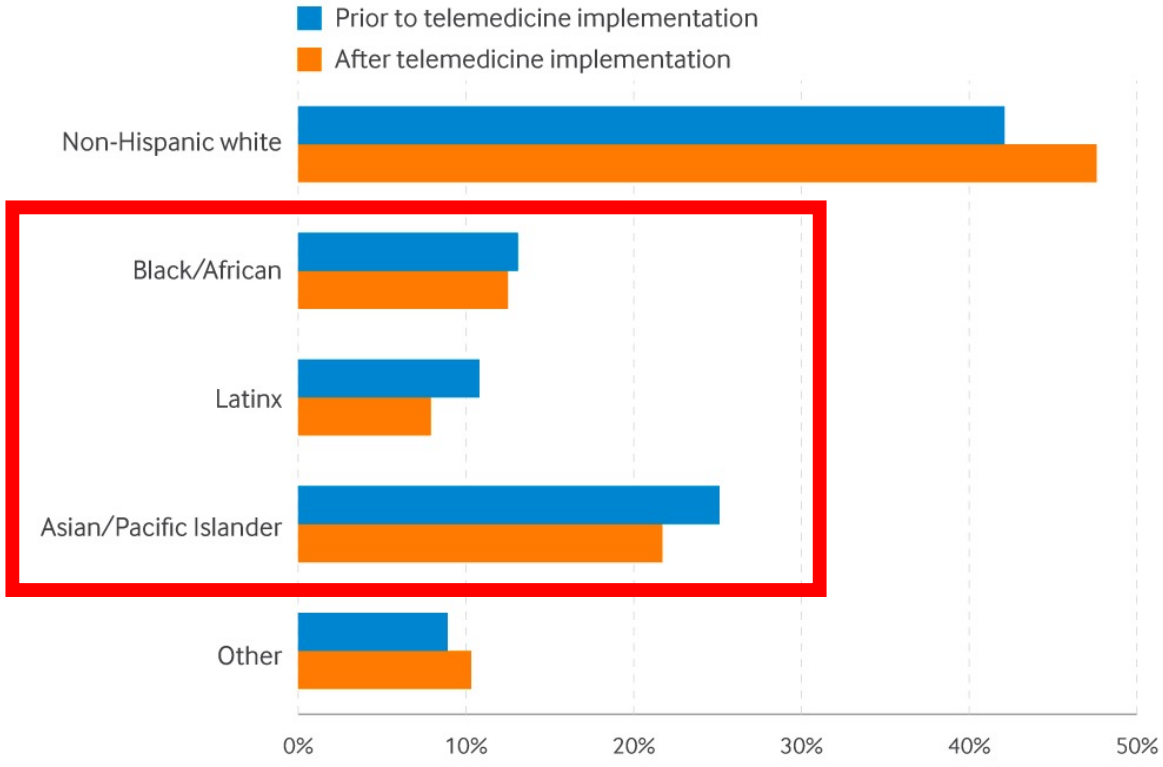


Source: The authors

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

Patient Visits by Race/Ethnicity Before and After Telemedicine Scale-Up

This chart shows the proportion of patient visits seen by patient race/ethnicity prior to (2/17–2/28/2020) and after (3/23–4/3/2020) scaled-up telemedicine implementation to address the Covid-19 pandemic at the UCSF General Internal Medicine Primary Care Practice (P=0.006 using chi-squared test). A smaller proportion of visits with vulnerable populations occurred after implementation.



Source: The authors

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

Nouri, Khoong, Lyles, Karliner,
NEJM Catalyst, 2020

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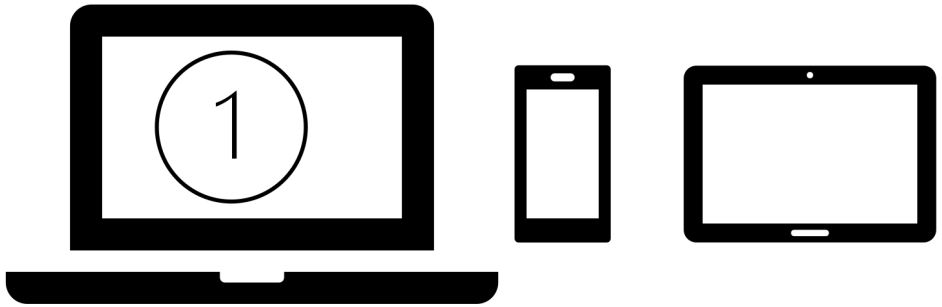
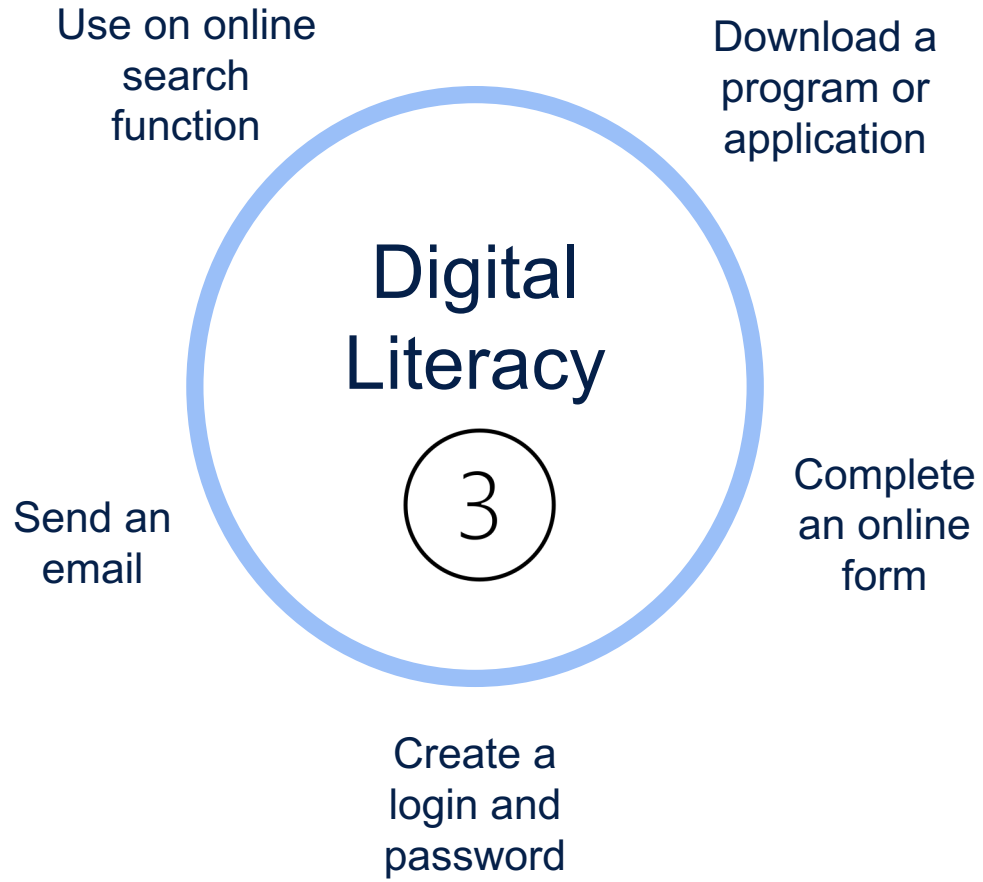
Patient-facing barriers to telehealth

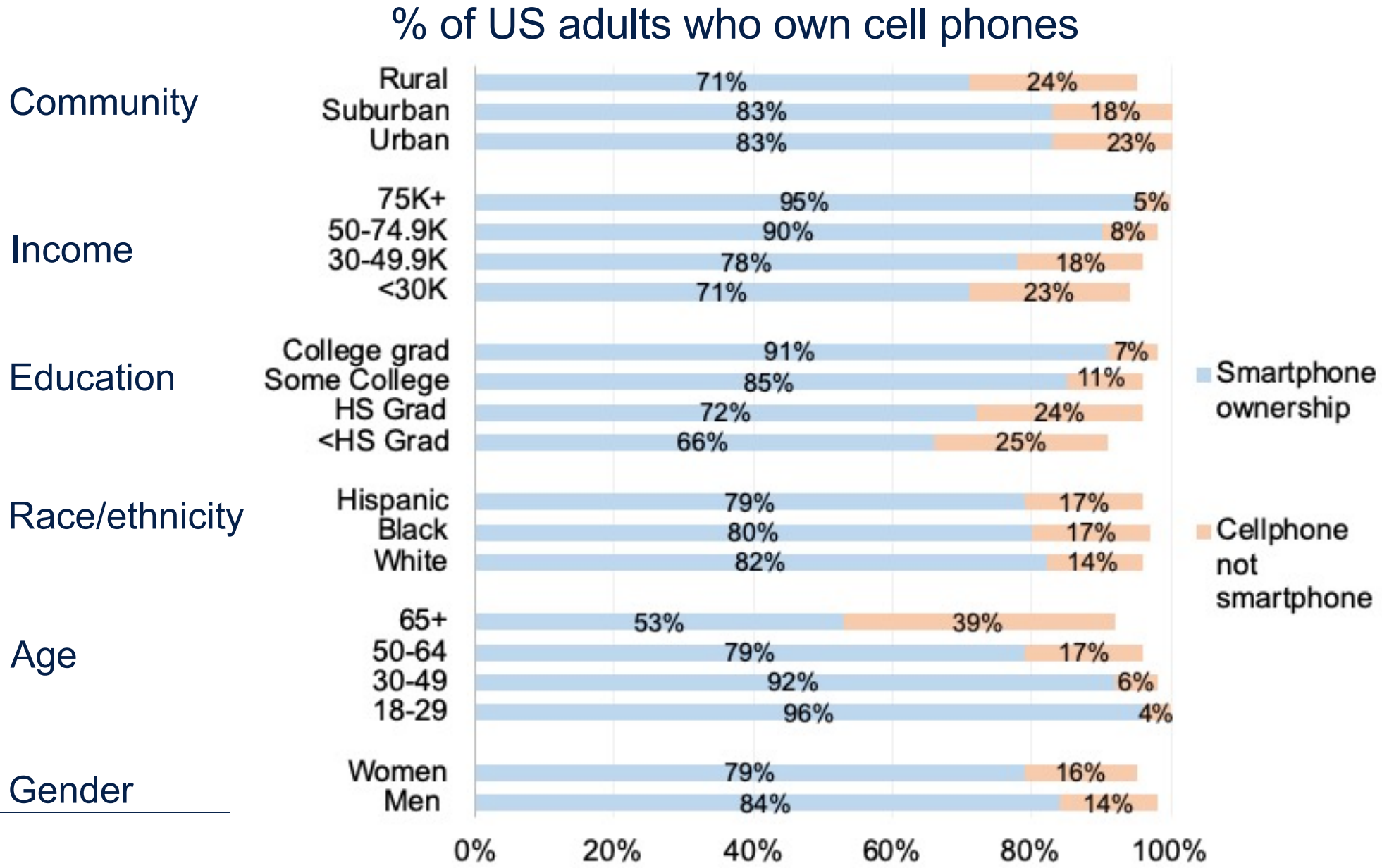


Video-enabled device
(and other remote monitoring devices)

High quality data access



Mobile device disparities exist by age, income, education, community



Pew Research, 2019

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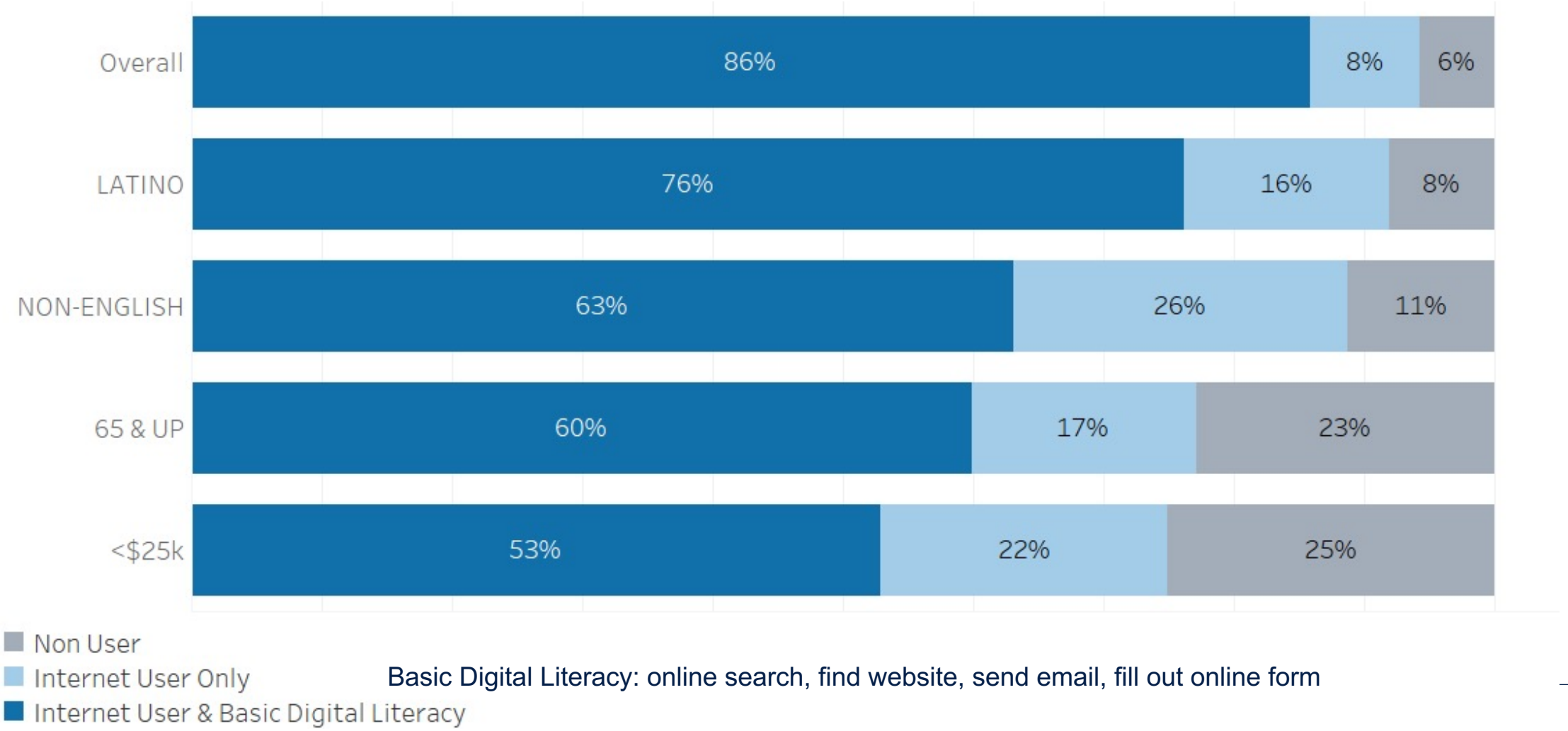
Digital Divide in San Francisco

Internet Usage & Basic Digital Literacy in San Francisco



Basic Digital Literacy: online search, find website, send email, fill out online form

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SF Office of Digital Equity, 2017-2018

Patient Interest in and Barriers to Telemedicine Video Visits in a Multi-lingual Urban Safety-Net System

Khoong, Butler, Mesina, Su, DeFries, Nijagal, Lyles; JAMIA 2020

Conclusions: Safety-net patients are interested in video visits and able to successfully complete test visits. Internet/data access is a common barrier and may impact equitable telemedicine access

Cross-sectional phone survey
of 202 patients scheduled for phone-only visits in safety-net system

87.6% racial minorities
55.9% non-English speakers

Asked each patient about:

Interest in video	Device access
Wi-Fi access	Barriers to video

65% (n=132)
interested in video visit over phone-only

54% (n=109)
were able to complete a test video visit

>50% (n=112) reported barriers to video visits
Most common:
- Inadequate data/Wi-Fi
- Hesitancy about technology
- No access to device

Factors associated with interest in video

Younger age (<55)	**73% interested in video**
Non-English language preference	**76% interested in video**
Prior smartphone app usage	**84.8% interested in video**

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UCSF Obstetrics, Gynecology & Reproductive Sciences

UCSF Center for Vulnerable Populations
@ucsfcvp
Department of Medicine

Resources for telehealth in safety-net settings
https://cvp.ucsf.edu/telehealth

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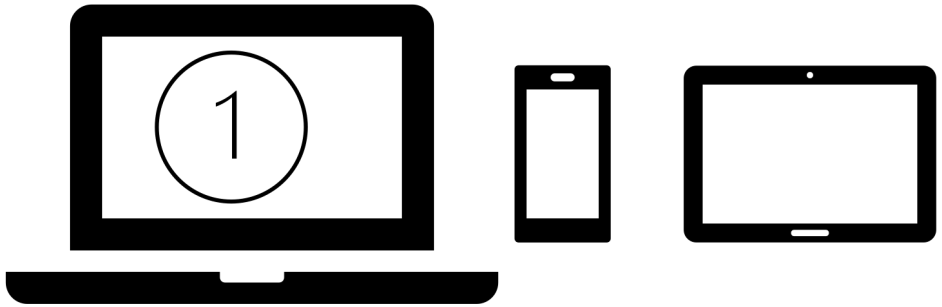
Clinician/System-facing barriers to telehealth



Video-enabled devices

New technology-focused roles and skills for healthcare team

- Telehealth physical exam
- Pre-appointment tech support
- Appropriateness for telehealth
- Connection to digital resources

2

HIPAA secure video platform

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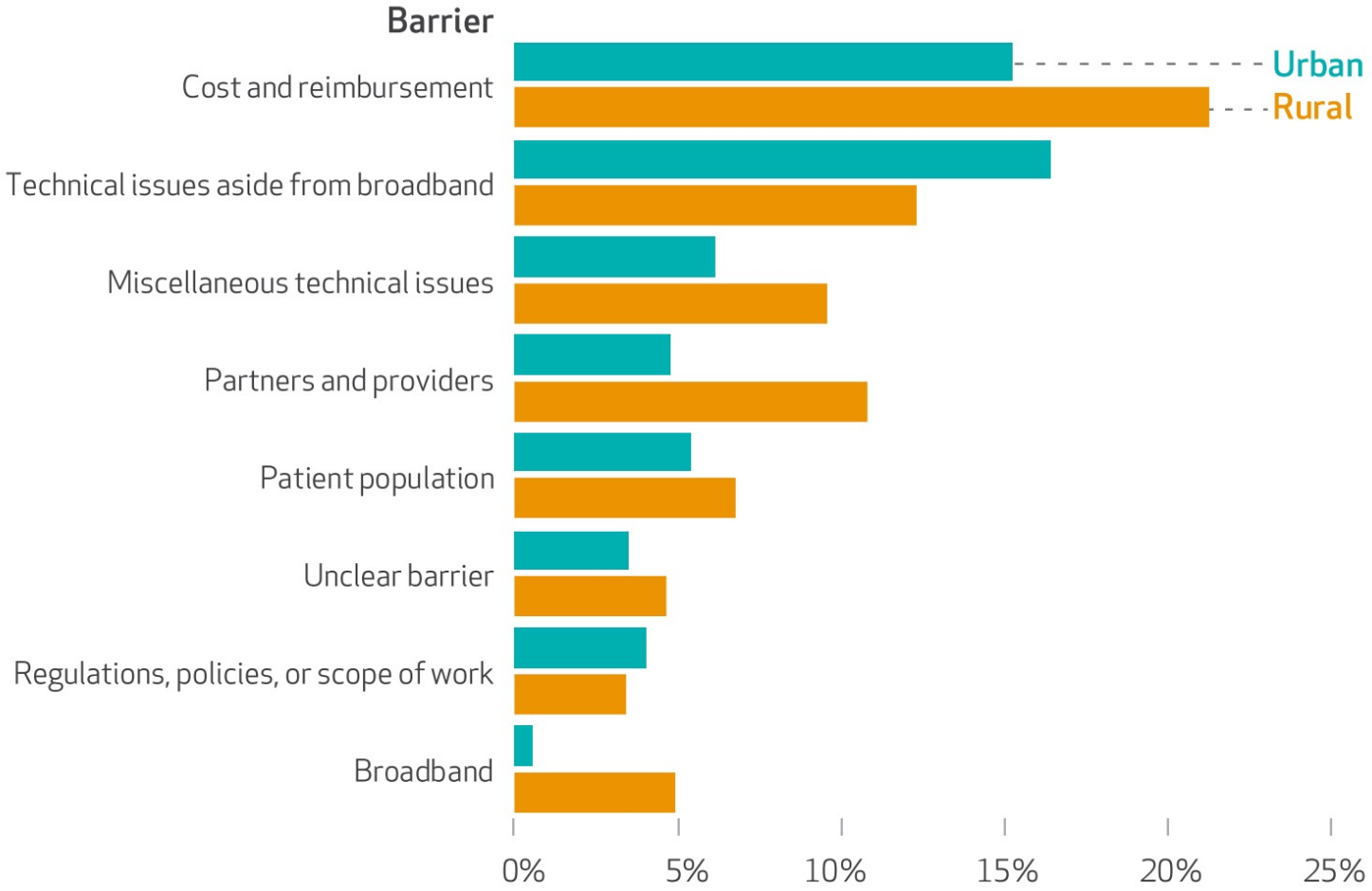
Pre-COVID Reasons for Low Adoption

EXHIBIT 4

Percent of community-based health centers not using telehealth, by urban/rural status and barriers to use cited, 2016



SOURCE Authors' analysis of data for 2016 from the Uniform Data System. **NOTES** $N = 844$. Health centers are those funded by the Health Resources and Services Administration (see the text).

Lin, Health Affairs, 2018

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Clinician concerns

Patient barriers

"…cannot reach… patients that don't have phones…"

"…phone plans add cost when phone visits are used… costs not covered in billing"

Logistic challenges

"…family being distracted"

"…difficulty with interpreter logistics ESPECIALLY when working remotely"

Safety concerns

"...explaining changes in medication doses without showing... Can be tricky/feel a little unsafe"

"…couldn't do… neuro exam on a patient in whom it would have been helpful…"

Satisfaction

"… significantly takes away from my satisfaction… I dread phone clinic days, sadly."

Clinicians' perceived benefits

Convenience / efficiency

"…valuable for patients who have limited transportation or ability to take time off work"

"…linking in interested family members is easy"

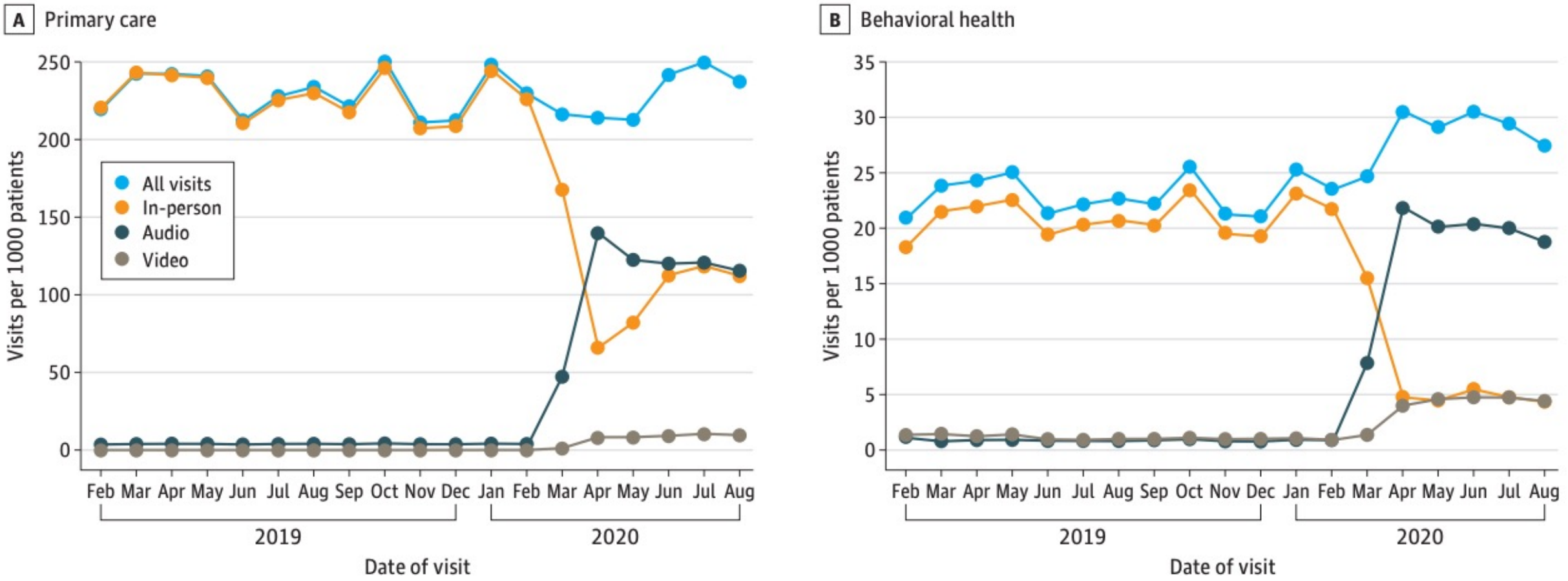
".. For managing some chronic conditions or doing social needs screening… very useful and more convenient for families…"

Patient comfort

"… patients asked more questions and were in some ways more engaged…"

Telemedicine in California Safety-Net Organizations

Figure. Primary Care and Behavioral Health Visits per 1000 Patients by Visit Type From February 2019 Through August 2020



Uscher-Pines et al.
JAMA 2021.

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Payor policies

Other Common Telehealth Restrictions

The specialty that telehealth services can be provided for

The types of services or CPT codes that can be reimbursed (inpatient office, consult, etc.)

The types of providers that can be reimbursed (e.g. physician, nurse, etc.)

Telephone/Audio-Only Service Delivery

5 states have added a permanent allowance for some type of telephone/audio-only delivered health care services since the COVID-19 emergency began. The addition of telephone was one of the most common COVID-19 temporary telehealth policy expansions, however not many states have taken the step to make this permanent.

Private Payer Reimbursement

43 States and the District of Columbia have laws that govern private payer reimbursement of telehealth. Some laws require reimbursement be equal to in-person coverage, however most only require parity in covered services, not reimbursement amount. Not all laws mandate reimbursement.

Consent

41 States and D.C. have a consent requirement in either Medicaid policy, law or regulation. This number has increased by two since Spring 2020.

Online Prescribing

Most states consider an online questionnaire only as insufficient to establish the patient-provider relationship and prescribe medication. Some states allow telehealth to be used to conduct a physical exam, while others do not or are silent. Some states have relaxed requirements for prescribing controlled substances used in medication assisted therapy (MAT) as a result of the opioid epidemic.

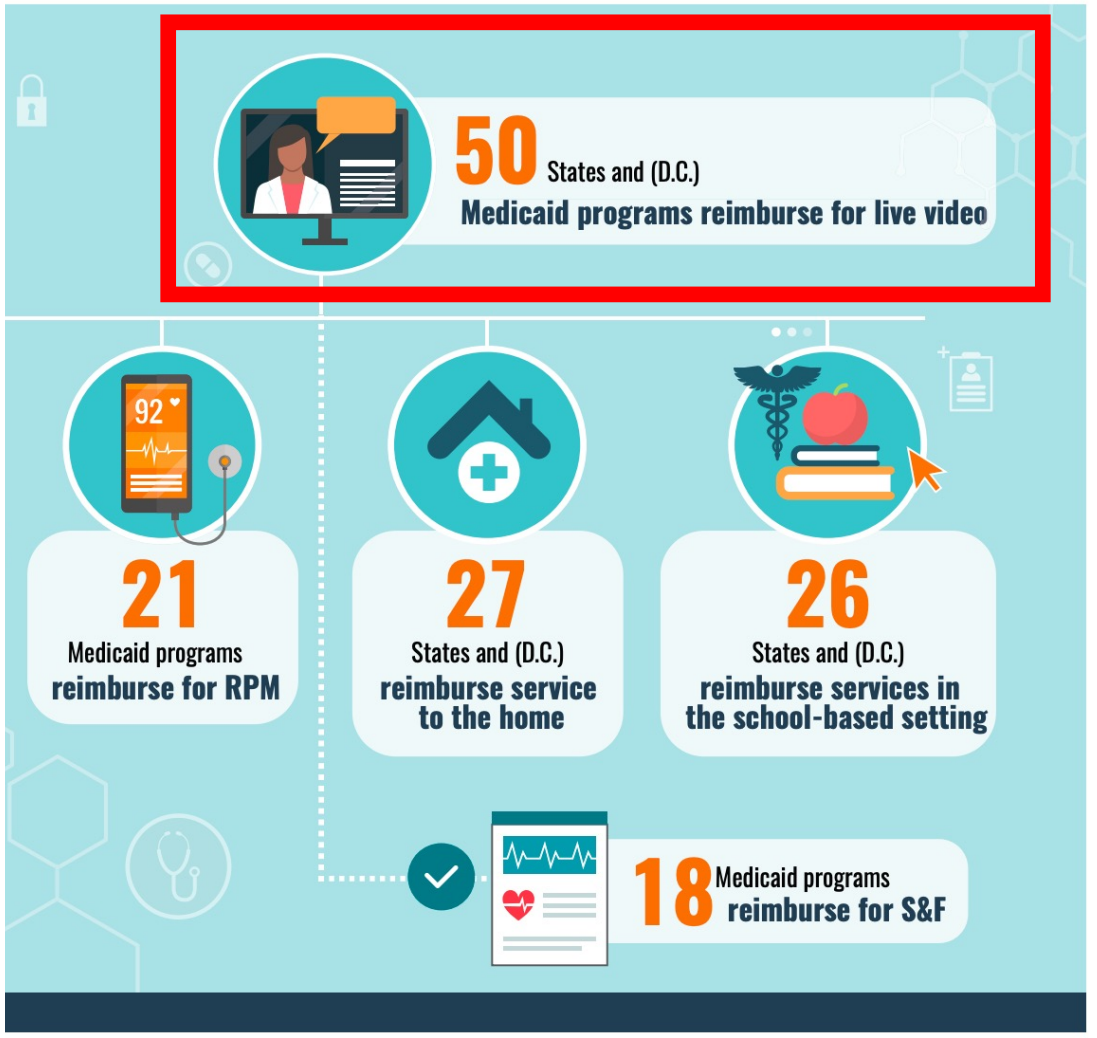
Often, internet/online questionnaires are not adequate; states may require a physical exam prior to a prescription.

More and more states are passing legislation directing healthcare professional boards to adopt practice standards for its providers who utilize telehealth. Medical and Osteopathic Boards often address issues of prescribing in such regulatory standards.

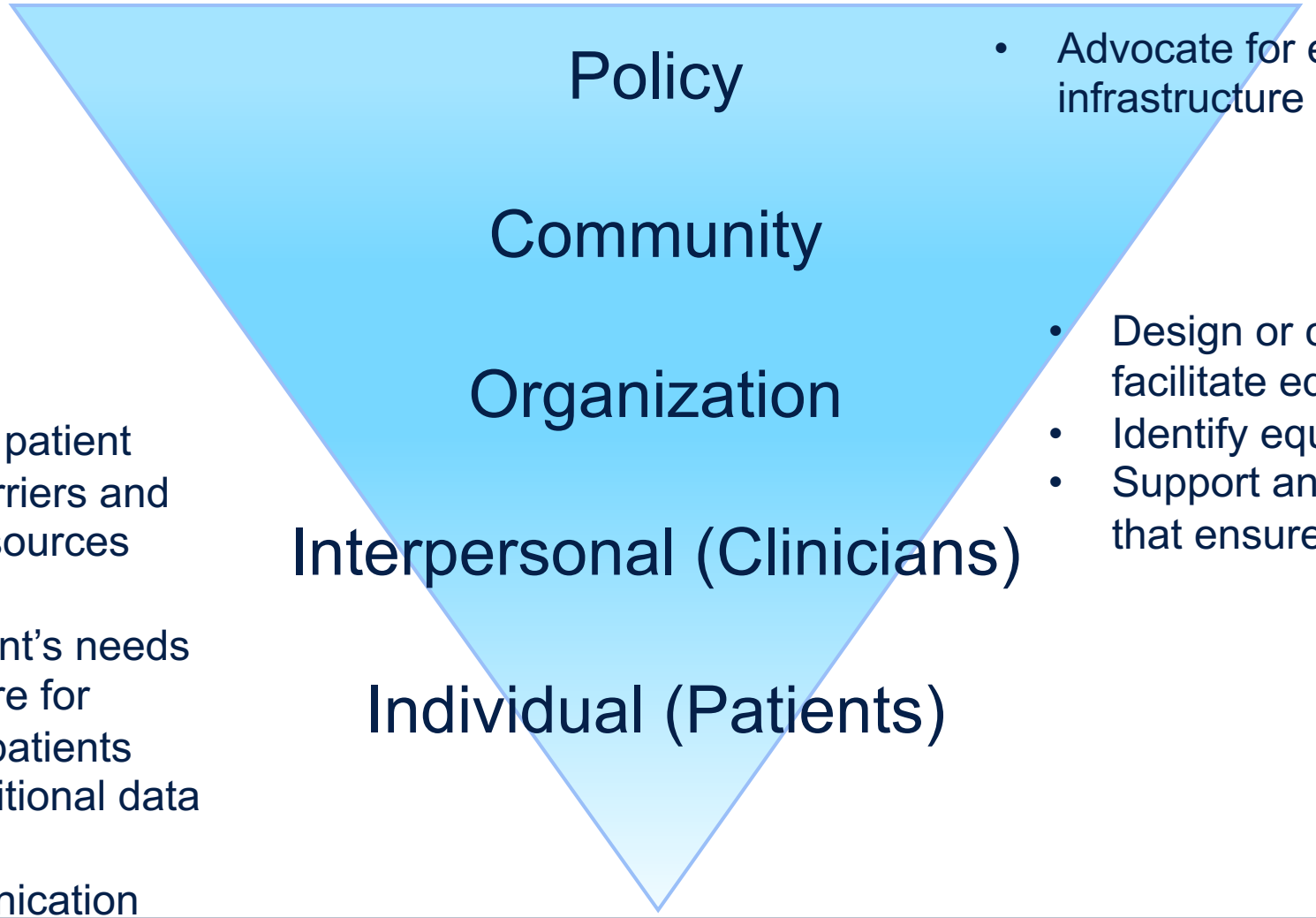
Licensure

Eight state boards issue licenses related to telehealth allowing an out-of-state licensed provider to render services via telehealth. Licensure Compacts have become increasingly common. For example:

- **28** States, D.C. & Guam: Interstate Medical Licensure Compact
- **34** States: Nurse Licensure Compact
- **28** States: Physical Therapy Compact
- **15** States: Psychology Interjurisdictional Compact (PSYPACT)
- **5** States: Audiology and Speech-Language Pathology Interstate Compact (ASLP-IC)
- **20** States: Emergency Medical Services Personnel Licensure Interstate Compact (REPLICA)



Solutions to Increase Telemedicine Equity



- Advocate for equitable infrastructure and payor policies

- Design or choose solutions that facilitate equity
- Identify equity metrics
- Support and invest in infrastructure that ensures equity

- Previsit
  - Offer to every patient
  - Screen for barriers and connect to resources
- During visit
  - Adapt to patient's needs
  - Prepare to care for underserved patients
  - Leverage additional data
- After visit
  - Verify communication preferences

Resources

- California Lifeline: https://www.californialifeline.com/
- Center for Care Innovations Telehealth Toolkit for Equity: https://www.careinnovations.org/resources/telemedicine-for-health-equity-toolkit/
- Center for Connected Health Policy: https://www.cchpca.org/policy-trends/
- FCC Broadband Benefit: https://www.fcc.gov/broadbandbenefit
- LEAP SF: Telehealth Resources for Intimate Partner Violence: https://www.leapsf.org/html/index.shtml
- National Digital Inclusion Alliance: https://www.digitalinclusion.org/
- NEJM Catalyst: Telemedicine Equity for Chronic Disease Management: https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0123
- ”Telehealth Equity: Before and After COVID-19” in Primary Care in the COVID-19 Pandemic: https://www.carequest.org/system/files/Primary-Care-in-the-COVID-19-Pandemic-Harvard-Report.pdf#page=251
- Trauma-Informed Telehealth Care: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7473719/
- UCSF Center for Vulnerable Populations: Telehealth in safety net settings: https://cvp.ucsf.edu/telehealth

Questions?

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