The Intersection of Telehealth & Health Equity: Risks and Opportunities

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June 18, 2021
Disclosures

I have no financial disclosures or conflicts of interest.
Telehealth

Synchronous
- Video visits (telemedicine)
- Audio-only phone visits
- Remote monitoring

Asynchronous
- Electronic medical record communication
- eConsults

TelePrEP
TeleBurns
Recent Explosion in Telehealth
National Data from CDC

Recent Explosion in Telehealth
Data from California Federally Qualified Health Centers

Recent Explosion in Telehealth
Data from Seattle’s Ryan White HIV Clinic

April 2020

Count

2019-01 2019-07 2020-01 2020-07
Month

Encounter Group: Office, Phone, Video, No Show

Wood BR et al. Unpublished.
Benefits of Telemedicine (Video Visits)
Many Advantages and Should Remain an Option

• Reduced risk of exposure to infectious illness
  – Avoid public transportation, waiting rooms, etc.

• Reduced access barriers
  – Transportation challenges
  – Missed work, child or other family care needs
  – Stigma of HIV or PrEP clinic

• Added insights
  – See the home environment

• Overall high patient satisfaction, lower cost to patients*

Disparities in Telehealth Access
The “Digital Divide”

• Digital Divide: “the gap that exists between individuals who have access to modern information and communication technology and those who lack access”

Network Modeling Analysis in Health Informatics and Bioinformatics (2021) 10:26
https://doi.org/10.1007/s13721-021-00300-y

SHORT COMMUNICATION

Telehealth and the digital divide as a social determinant of health during the COVID-19 pandemic

Camille A. Clare

Received: 23 October 2020 / Revised: 5 March 2021 / Accepted: 22 March 2021
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Definition from: The Digital Divide Council (digitaldividecouncil.com)
Telemedicine (Video Visit) Needs

Social Determinants of Digital Health

- Device with sufficient data
- Reliable broadband
- Technical literacy
- Language proficiency
- Privacy
- Social support

Wood BR et al. CID 2020.
Sources of the Digital Divide

Smartphones & Broadband Subscriptions in the U.S.
Rates vary by social determinant of health

8.1/10 U.S. adults own a phone
7.3/10 U.S. adults subscribe to broadband

BROKEN DOWN BY (%)

AGE

RACE
White: 82, 79, 80, 79, 66, 79, 61
Black: 91, 93, 85, 77, 71, 56
Hispanic: 95, 92, 83, 78, 71, 56

EDUCATION
College+: 83, 79, 83, 75, 71, 63
Some College: 91, 93, 85, 77, 71, 56
High School of Less: 95, 92, 83, 78, 71, 56

INCOME
$75k+yr: 83, 79, 83, 75, 71, 63
$30k-$74.9k/yr: 91, 93, 85, 77, 71, 56
$30k/yr: 95, 92, 83, 78, 71, 56

RESIDENCE
Suburban: 83, 79, 83, 75, 71, 63
Urban: 91, 93, 85, 77, 71, 56
Rural: 95, 92, 83, 78, 71, 56

Recreated with permission from the Pew Research Center

Wood BR et al. CID 2020. Image recreated with permission from Pew Research Center.
Pre-Pandemic Telehealth Use & Readiness Uneven
Predictors of Use From Survey of 85k CA Residents

More likely

Less likely

Limited English proficiency
Medicaid or uninsured
Lack a usual source of care
Live non-metropolitan

Female
Higher income

Early Pandemic Telehealth Uptake Uneven
Real World Clinical Data

• UPenn primary care & subspecialty outpatient visits\(^1\)
  - Less telehealth: older, Asian, limited English proficiency (LEP)
  - Less video: older, female, Black, Latinx, lower income

• UPenn Cardiology & GI clinics\(^2,3\)
  - Phone not video: Black, female, older, lower income, LEP
  - Less likely to use online portals: Black, older

• Seattle Ryan White HIV clinic\(^4\)
  - Associated with video visit: age, race, insurance, eCare login

Expanding Telemedicine Risks Worsening the Digital Divide

Additional Telemedicine Risks

• Exacerbating implicit biases
• Less personal care/less rapport or trust
• Reduced quality of clinical care
  - Limited physical exam
  - Challenge coordinating labs
• Added administrative burden
Risk but also Opportunity: Promote Awareness, Quantification & Interventions to Reduce Disparities

Advancing Digital Health Equity: A Policy Paper of the Infectious Diseases Society of America and the HIV Medicine Association

Brian R. Wood, Jeremy D. Young, Rima C. Abdel-Massih, Lewis McCurdy, Todd J. Vento, Shireesha Dhanireddy, Kay J. Moyer, and John D. Scott

March 26, 2021

Bridging the Digital Divide to Avoid Leaving the Most Vulnerable Behind

Nicholas W. Eyrich, MS; Juan J. Andino, MD, MBA; David P. Fessel, MD

Ensuring The Growth Of Telehealth During COVID-19 Does Not Exacerbate Disparities In Care

David Velasquez, Ateev Mehrotra

MAY 8, 2020
Opportunities to Advance Digital Health Equity

Advocacy & Policy

• Commit (at all levels) to expand access to devices & broadband, develop telehealth infrastructure, promote technical literacy, create new reimbursement models

• Extend emergency waivers permanently (payment equity for video visits, reimbursement for phone visits) & allow treatment across state lines

• Partner with industry and help tech giants understand their role & reasons to invest in this issue

• Bring key stakeholders together (providers, patients, CBO’s, tech, public & private healthcare leaders)

Opportunities to Advance Digital Health Equity
Research

• Better understand patient preferences and needs
  - Not all patients want telemedicine, but those who do should
    have equitable access to it and opportunity for it
  - Surveys, focus groups, community input

• Quantify telemedicine usage and barriers

• Study implementation barriers and solutions

• Understand implicit biases so that we can address them
Opportunities to Advance Digital Health Equity
Clinical & QI Interventions

• Standardize telemedicine checklists; test visits ahead of time
• Give devices with data plans and/or hotspots & headphones
• Telemedicine stations at accessible locations
• Telehealth training kiosks; telehealth interpreters/navigators
• Interpreters (including sign language) & other accommodations*
• Instructions in multiple languages, via simple platforms (SMS)
• Start tele-visits with a check-in about privacy
• Include telehealth usage/gaps as key performance indicators

Sample telemedicine checklist

Checklist for Telemedicine Visit

☐ Denote patient details and location for visit

Name: __________________________ MRN: __________________________

Patient plans to join encounter from: __________________________ (specify location)

☐ Determine language needs

English | Spanish | Other: __________________________ (specify language if Other)  ☐ Interpreter needed

☐ Identify hardware and software needs

Telemedicine Software: __________________________ EHR | External Portal

Connectivity:  Internet | Broadband  ☐ Headphones needed

(circle one)  (select how patient will connect)

Device:  Desktop | Laptop | Tablet | Smartphone

(circle one)

☐ Test hardware and software  ☐ Test call completed

Conduct test call and then fill out the video and audio assessments below

Video Quality: Acceptable | Poor

(circle one)  (describe any issues you experienced)

Issues: __________________________

Audio Quality: Acceptable | Poor

(circle one)  (describe any issues you experienced)

Issues: __________________________

☑ Denote any additional assistance needs

(e.g. family memeber, telemedicine navigator, other)

☐

Completed By: __________________________  Date/Time: __________________________ / __________________________

(print name)  (mm/dd/yyyy)  (hh:mm)
Conclusions

Telehealth is Public Health

• As a community, we need to consider telehealth access as a social determinant of health and commit to promoting digital inclusion to mitigate worsening disparities.

• It is important to acknowledge and better understand the risks of telehealth, so that together we can turn this era into an opportunity to improve healthcare access.

• Closing the digital divide will take collaborative effort between numerous key stakeholders along with policy changes, research, advocacy, and community engagement.
Resources

- CCI Telemedicine for Health Equity Toolkit: https://www.careinnovations.org/resources/telemedicine-for-health-equity-toolkit/

- UCSF S.O.L.V.E. Health Tech: https://solvehealthtech.ucsf.edu/

- UW Telehealth Toolkit: https://thetelehealthtoolkit.com/