# Strategies to Improve Digital Literacy and Internet Access to Advance Diagnostic Equity

Workshop: Advancing Equity in Diagnostic Excellence to Reduce Health Disparities.

Panel: Leveraging Technological & Diagnostic Innovations to Improve Access and Mitigate Diagnostic Disparities

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Public Health Innovators, LLC

# Financial Relationship Disclosures

- Colorado School of Public Health/mHealth Impact Lab
- Community Tech Network
- Conduent/Healthy Communities Institute
- Digital Medicine Society
- Digitunity
- Literacy Minnesota
- National Digital Inclusion Alliance
- Network for Digital Evidence in Health (NODE.Health)
- Project Hope/Health Affairs*
- SF Tech Network
- UC Davis, Mount Sinai School of Medicine, Cleveland Clinic, University Hospitals

*Sheon A, Khoong E: Pillars, Policies, And Plausible Pathways Linking Digital Inclusion and Health Equity, Health Affairs Policy Brief, May 2, 2024.

# Digital Inclusion

The activities necessary to ensure that all individuals and communities have the information technology capacity needed for full participation in society and the economy. Includes:

1. Affordable, robust broadband internet service;

2. Internet-enabled devices that meet the needs of the user;

3. Access to digital literacy training & privacy/cybersecurity awareness;

4. Quality technical support; and

5. Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.

Digital Inclusion must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology.

Digital Equity Act of 2021

NDIA
NATIONAL DIGITAL INCLUSION ALLIANCE

https://www.digitalinclusion.org/definitions/

NATIONAL DIGITAL INCLUSION ALLIANCE

The **Digital Equity Act of 2021 (DEA)**, part of the IIJA, establishes 3

$2.75B

The **Affordable Connectivity Program (ACP)**, formerly the Emergency Broadband

$14.2B

The **Broadband Equity, Access, and Deployment (BEAD) Program**, established

$42.45B

# Internet for All Programs from IIJA

# *"Adding Digital Equity to our Social Safety Net"*

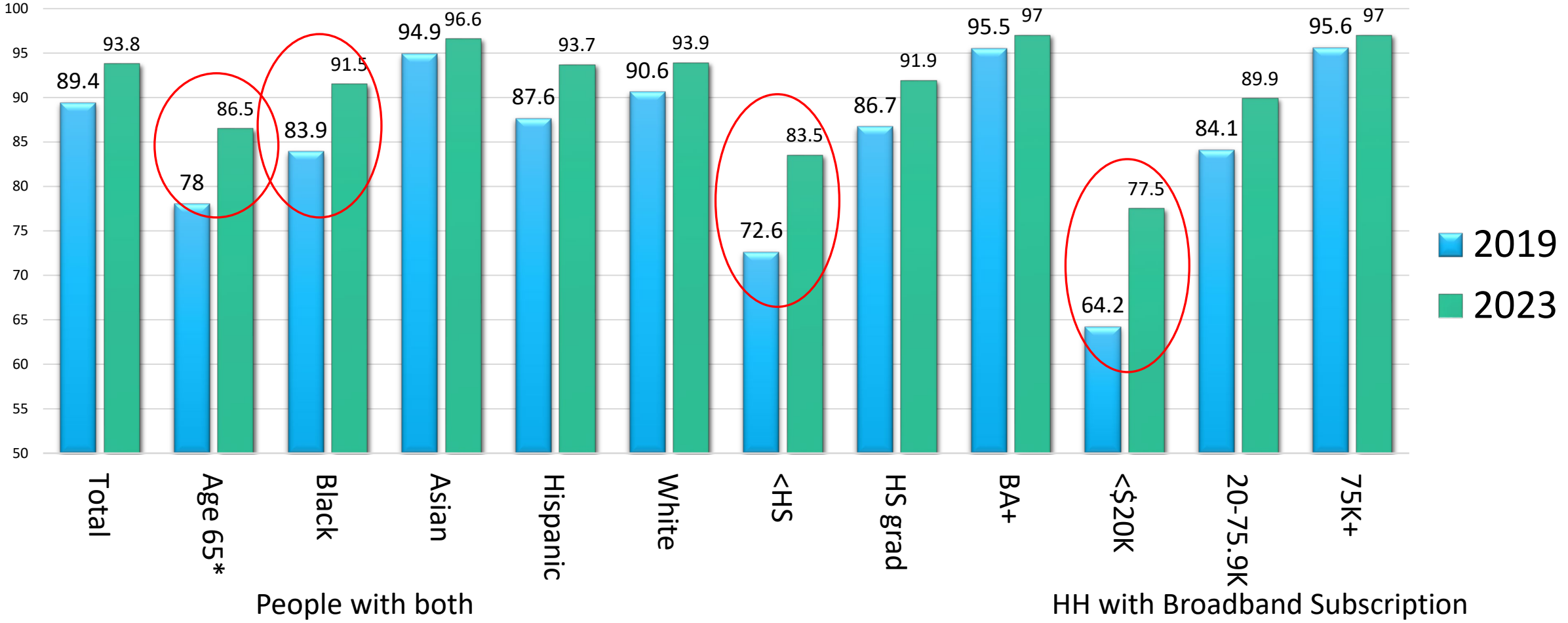
Digital Navigators

Digital navigators are trusted guides who assist community members with ongoing, individualized support for accessing affordable and appropriate connectivity, devices, and digital skills.

NDIA

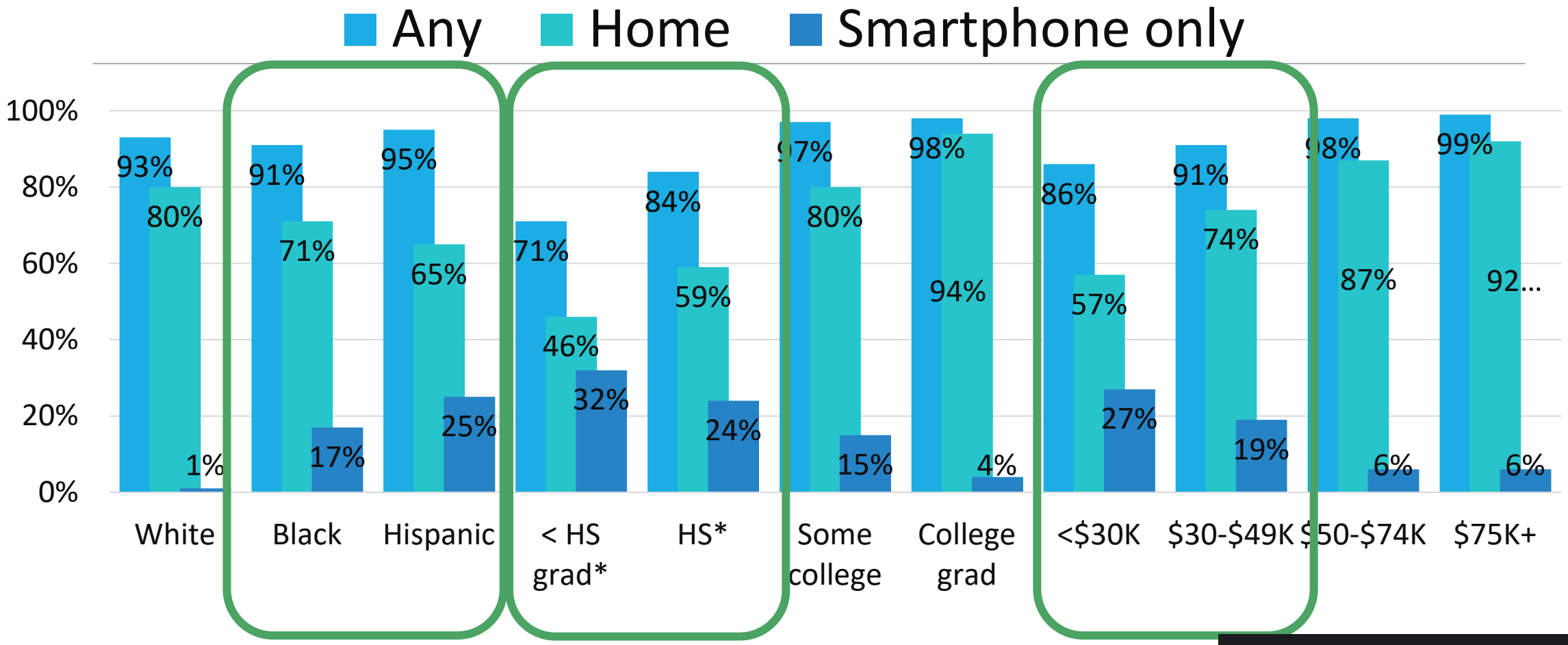
https://www.digitalinclusion.org/digital-navigator-model/

# % With a Computer and Broadband 2019, 2023




Source: Census ACS 1-Year Tables S2801 and S2802

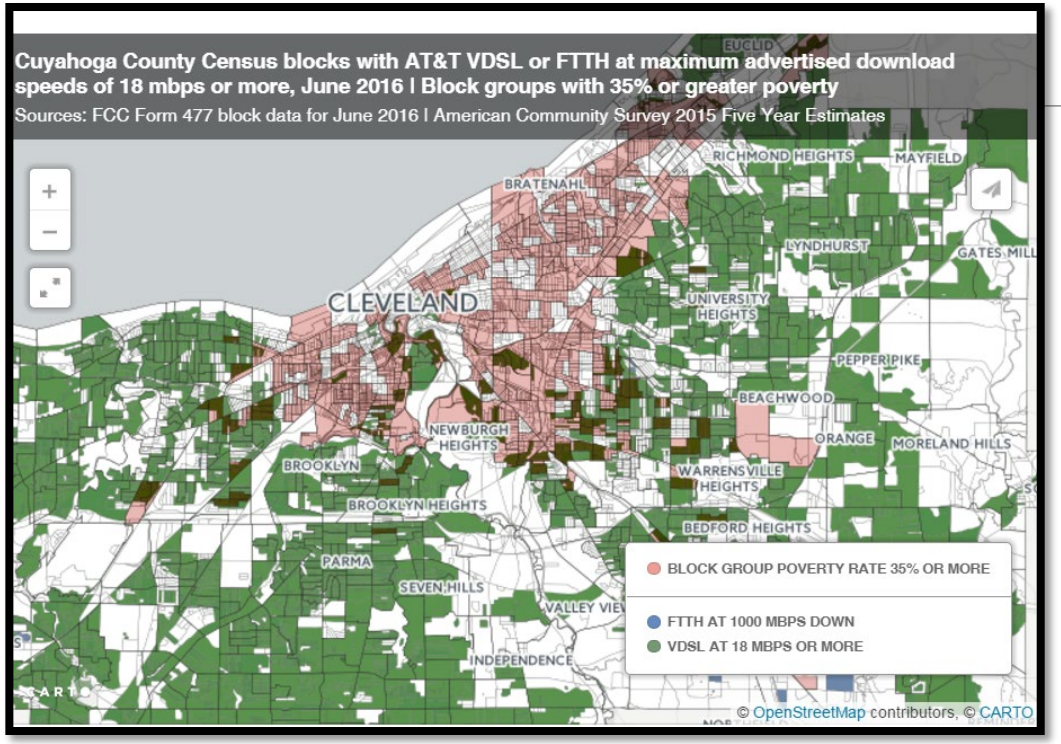
# Any, Home and Smartphone Only, 2021



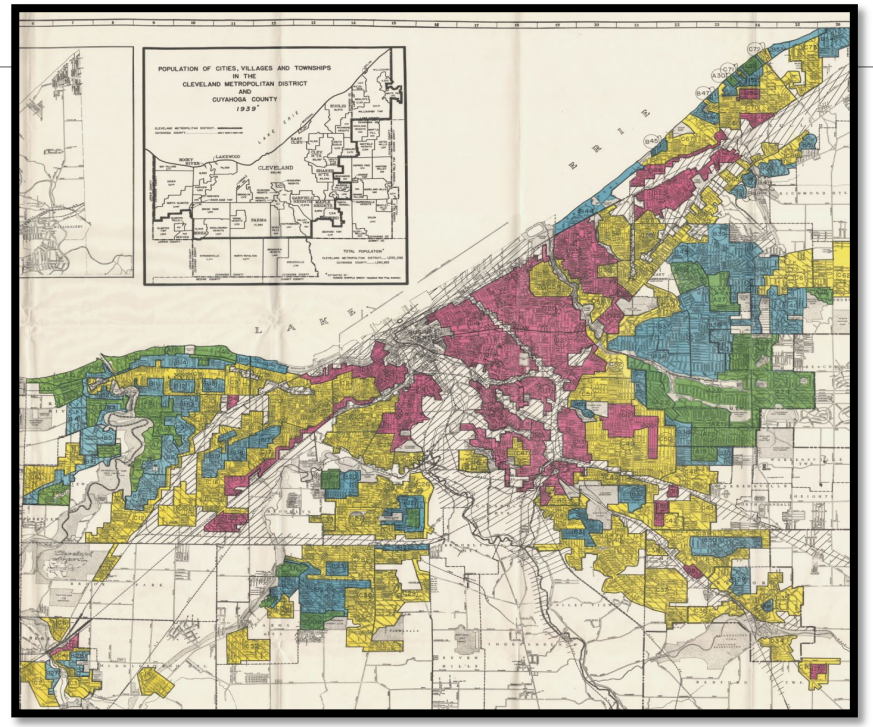

*Data are from 2019 because categories were combined in 2021

Pew Research Center

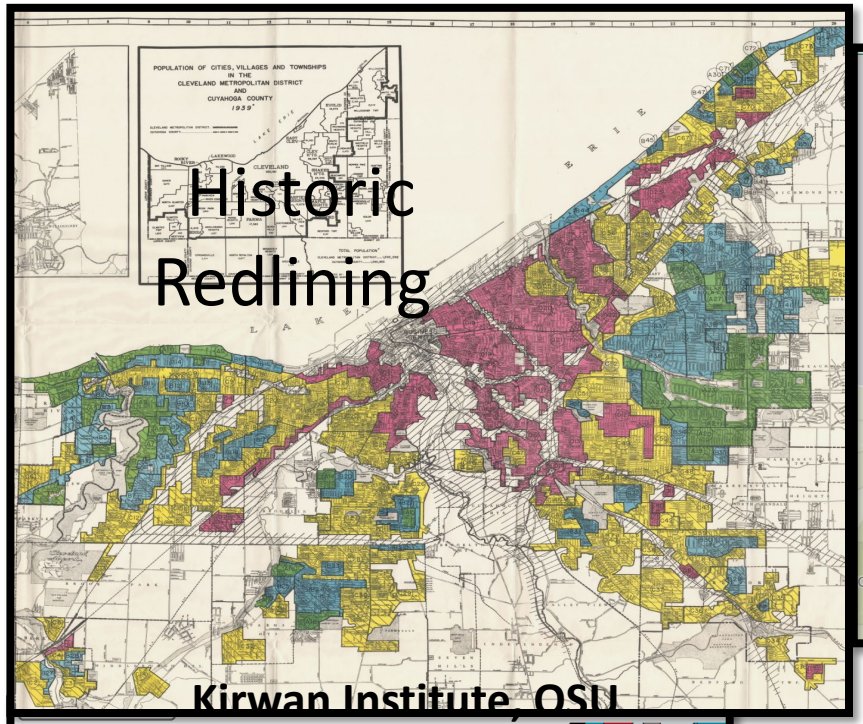
# Digital Redlining Replicates Historic Redlining

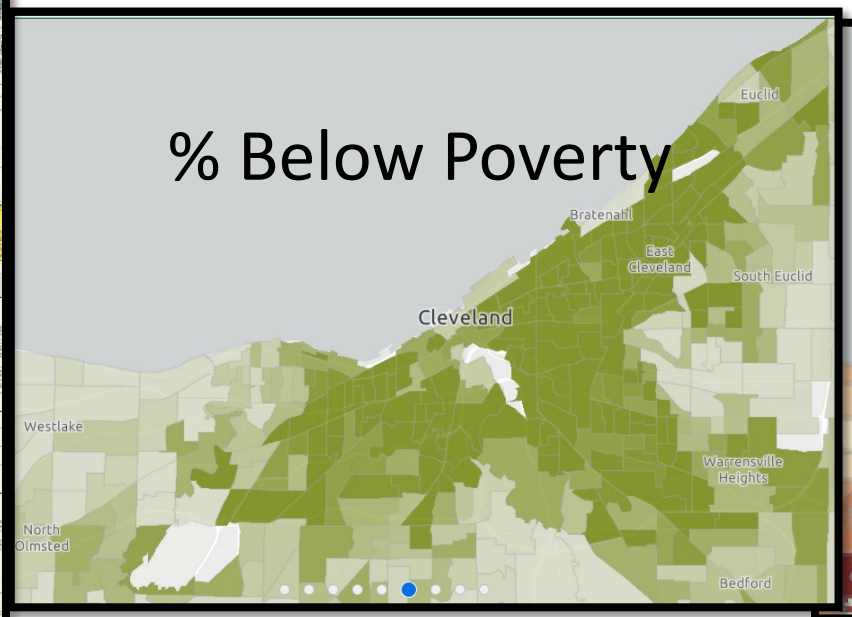


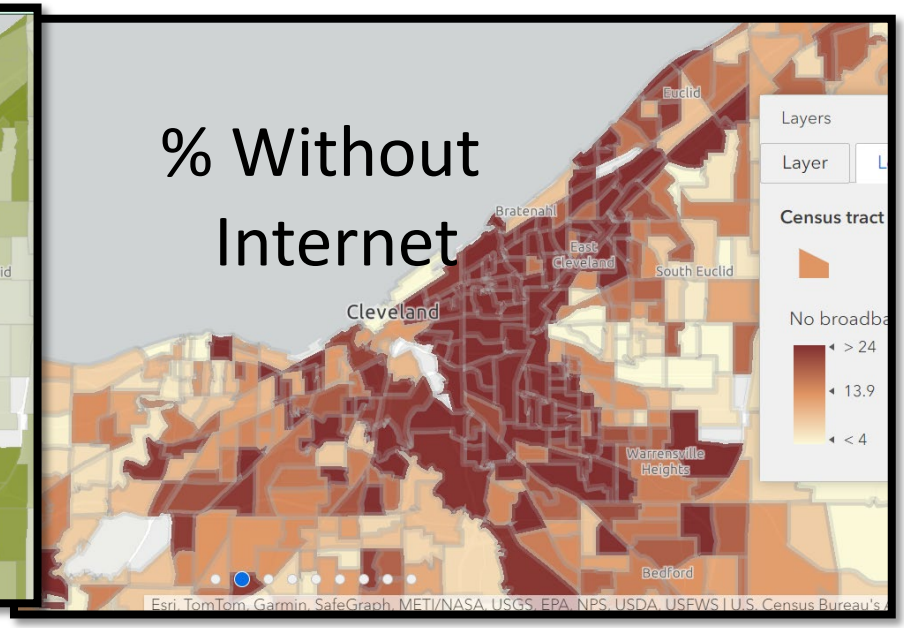

https://www.digitalinclusion.org/blog/2017/03/10/atts-digital-redlining-of-cleveland/

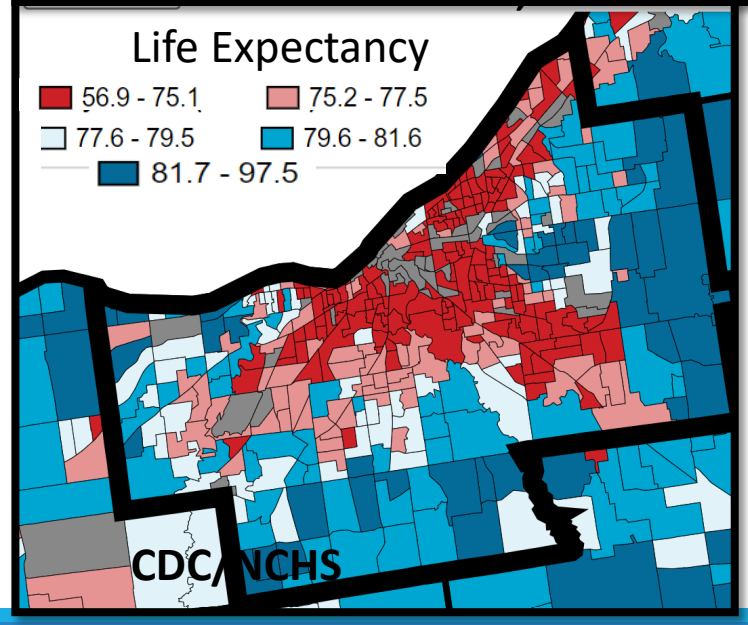


**Kirwan Institute, OSU**


Historic Redlining
Kirwan Institute, OSU

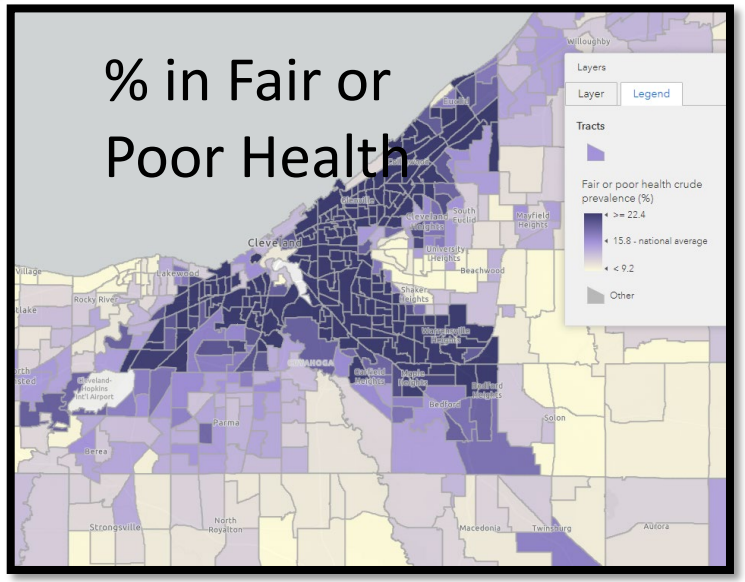

% Below Poverty

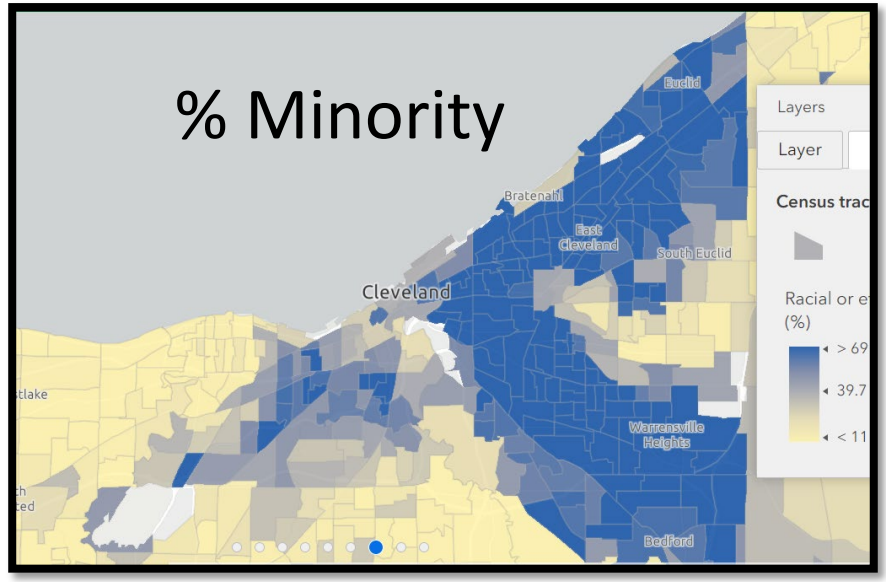


% Without Internet

CDC/NCHS

CDC Places


% in Fair or Poor Health



% Minority

# Continuous Glucose Monitoring

Adopt User-Friendly Technology

## The Voices of Type 2 Diabetes

BY TARA PARKER-POPE AUGUST 4, 2009 12:50 PM

NEW YORK TIMES

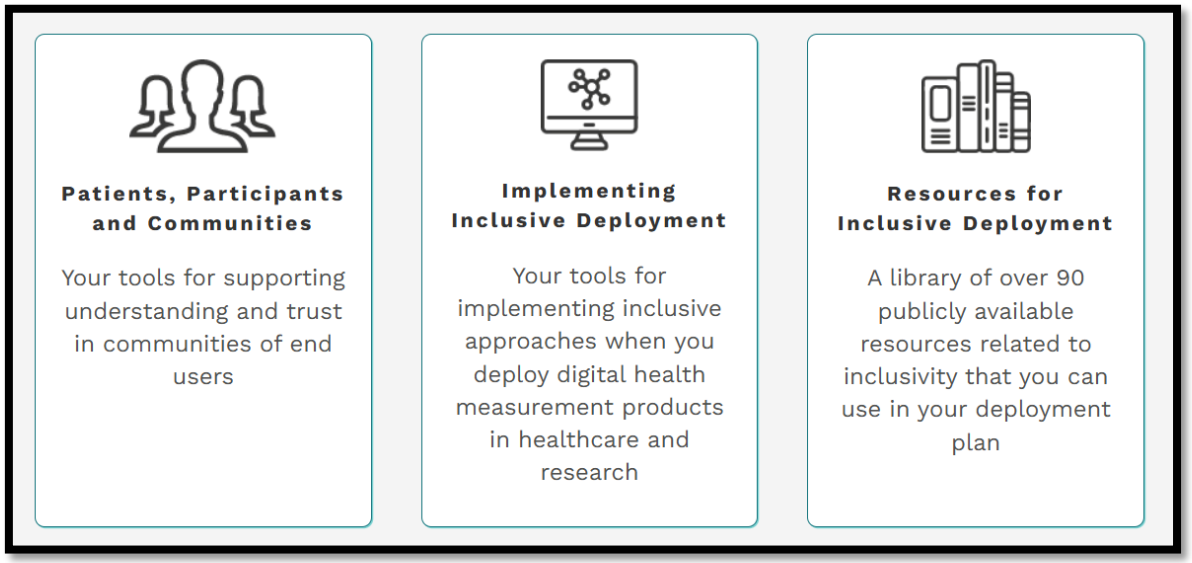
GOOGLE SEARCH:

CGM IMAGES 7/26/2024

# Toolkits for Inclusive Digital Medicine

## Development

## Deployment

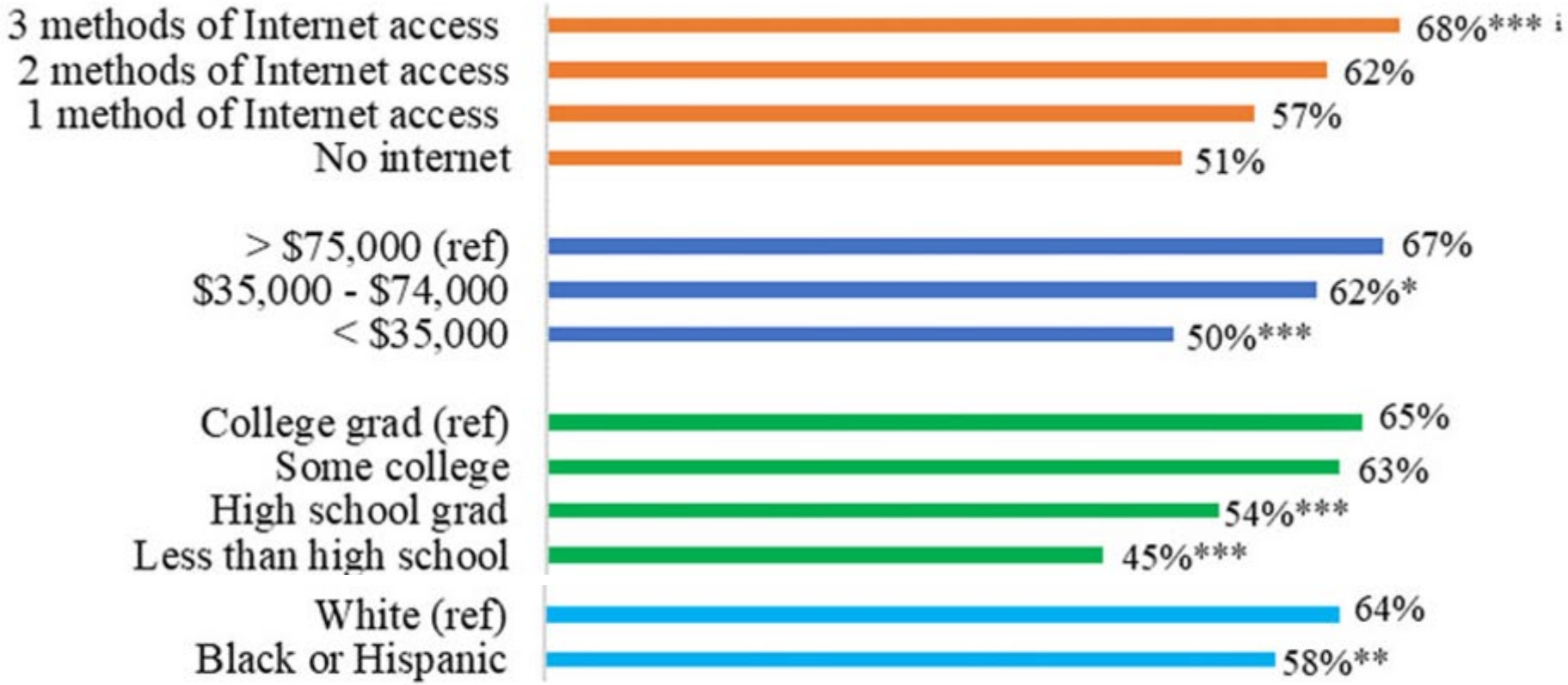



https://datacc.dimesociety.org/development/

https://datacc.dimesociety.org/deployment/

# Probability of Being Offered Patient Portal

HINTS 2019, 2020; n=8028. Richwine, et al, Jamia 2022, https://doi.org/10.1093/amia/ocac227



# Digital Inclusion Model for Digital Health Equity

Monitor Use Equity

Universal Provider Encouragement

Adopt User-Friendly Technology

Identify, characterize non-users

Harvard Business Review

Healthcare And Treatment

## A Simple Way to Identify Patients Who Need Tech Support for Telemedicine

by Helen K. Hughes, Rebecca Canino, Stephen D. Sisson, and Brian Hasselfeld

August 10, 2021

*"A function embedded in Johns Hopkins Medicine's electronic-health-record system automatically identifies patients likely to need technical assistance…"*

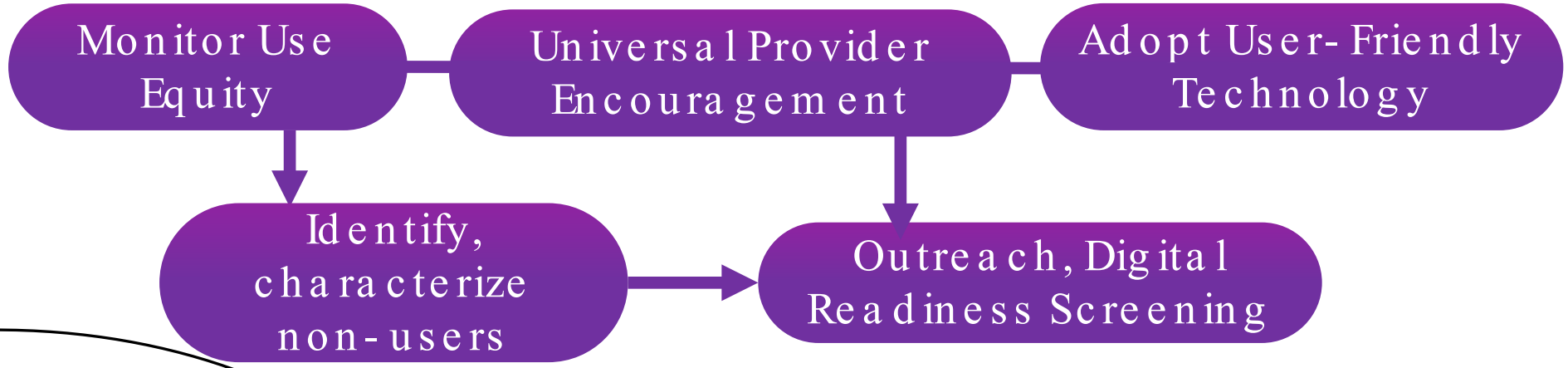
# Covered Populations

Identify, characterize non-users

- In household with <150% FPL
- Older adults (60+)
- Incarcerated
- Veterans
- Disabilities
- Language barrier (including ESL and low literacy)
- Racial or ethnic minority group
- Rural

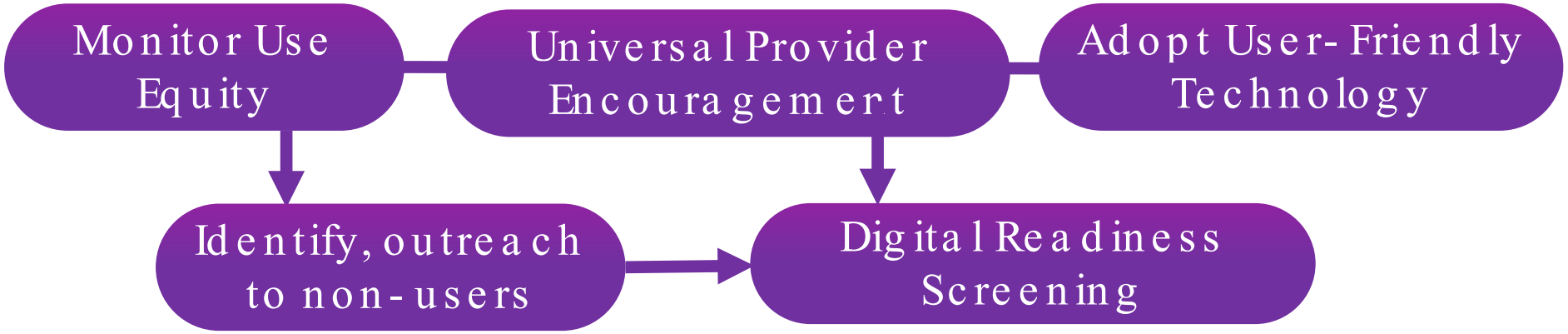
Digital Equity Act of 2021

# Digital Inclusion Model for Digital Health Equity




"Here-give me your phone. Let me download Mychart for you. Type in your password"

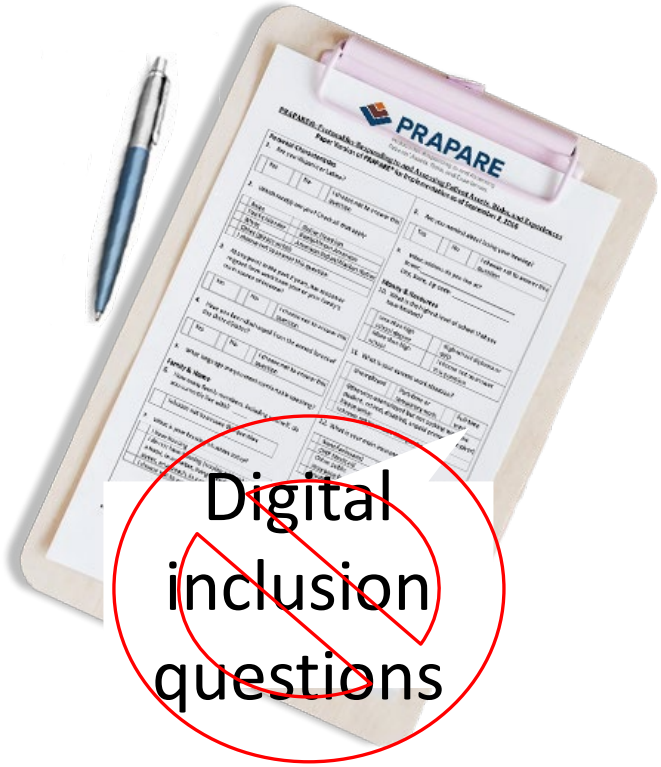
# Digital Inclusion Model for Digital Health Equity




## Digital Inclusion as a Social Determinant of Health

NPJ Digit Med. 2021

Cynthia J. Sieck, Amy Sheon, Jessica S. Ancker, Jill Castek, Bill Callahan, and Angela Siefer, PMID: 33731887



# Challenges for Creating a Standard Tool

Assess all components of digital inclusion

Consider individual, household and neighborhood perspectives

Device nuances:  current, fit to use, sharing, security

Connectivity nuances: mobile, home; household needs

Skills

Lack of consensus around what standard needs to be met

Covered population needs

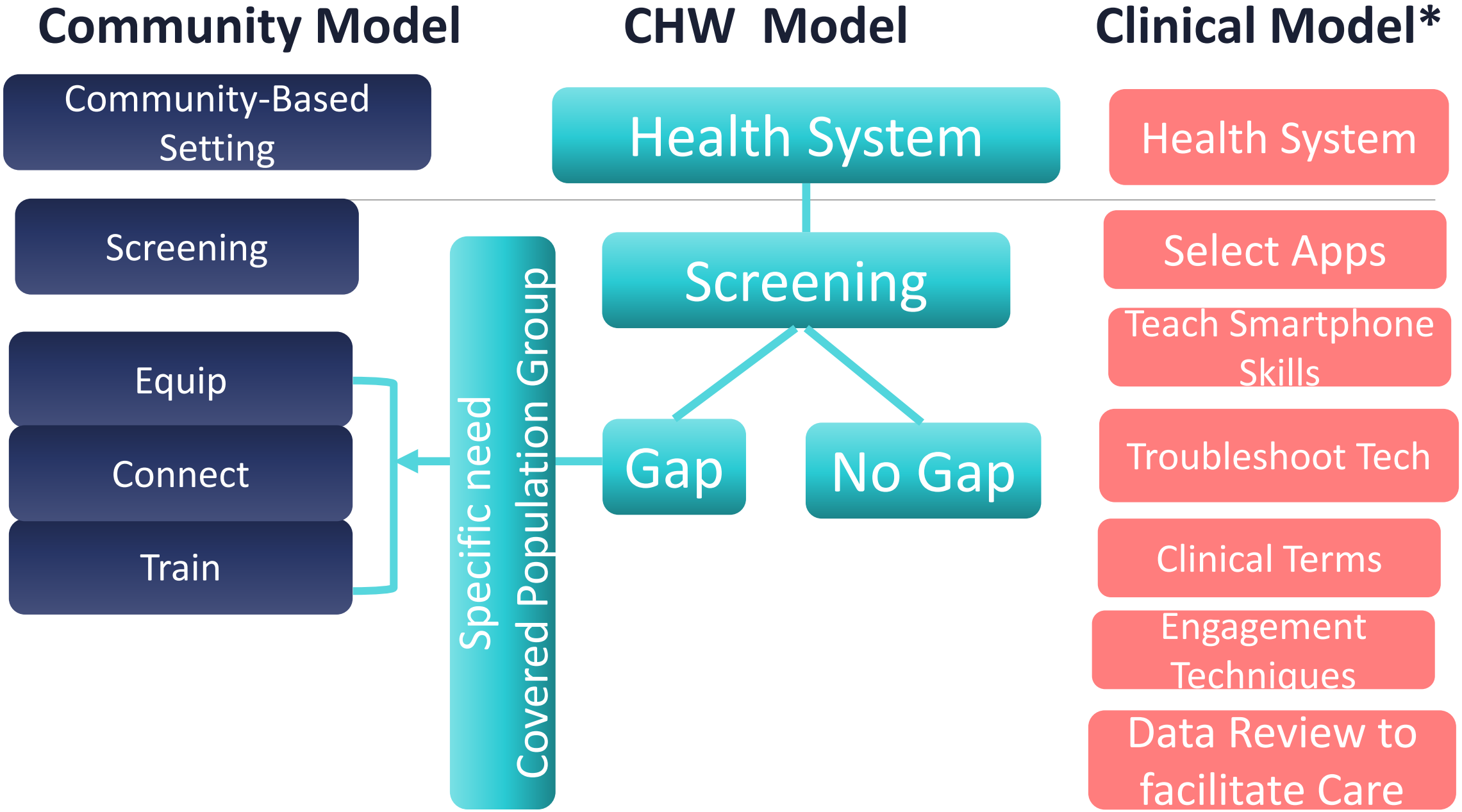
# Context

Trigger for screening

How is instrument made available?

Who does screening?

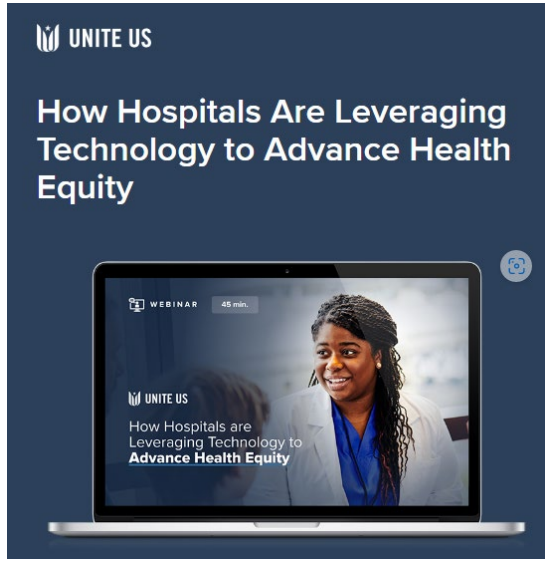
What do you do about gaps?



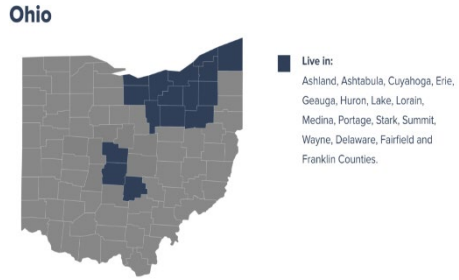



*Wisniewski, et al Dig Biomarkers 2020

# Refer to community organizations for social needs




- Identify local digital inclusion organizations
- Connect with existing SDOH referral platform




UNITE OHIO

Funding Partners

MetroHealth
Devoted to Hope, Health, and Humanity

Cleveland Clinic

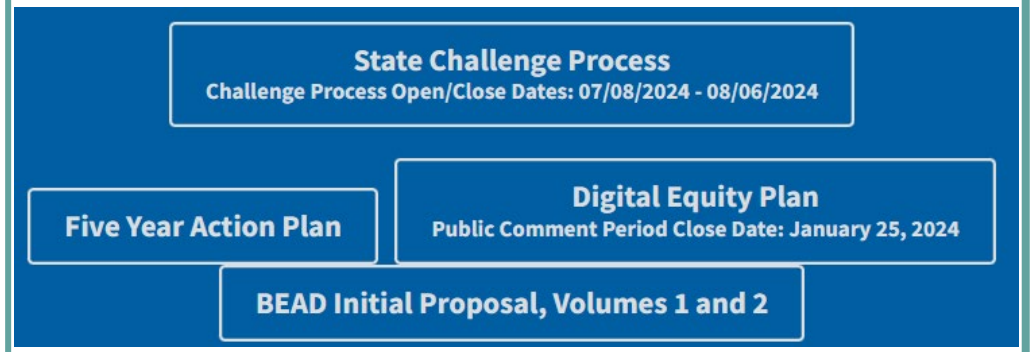
University Hospitals

# Find Digital Inclusion Partners

## Find NDIA Affiliates

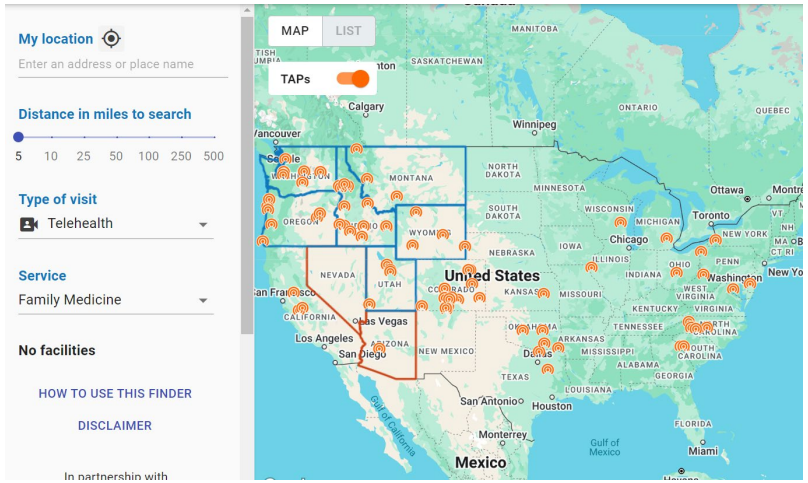
https://www.digitalinclusion.org/affiliates/

## Find your State Digital Equity Plan




https://broadbandusa.ntia.gov/public-notice-posting-state-and-territory-bead-digital-equity

## Find Telehealth Access Points




https://findtelehealth.nrtrc.org/map

## Community Model

Community-Based Setting

Screening

Equip

Connect

Train

Digital Health Training

## CHW Model

Health System

Screening

Gap

No Gap

Tech Support

Digital Health Training

# Digital (Health) Navigation Resources

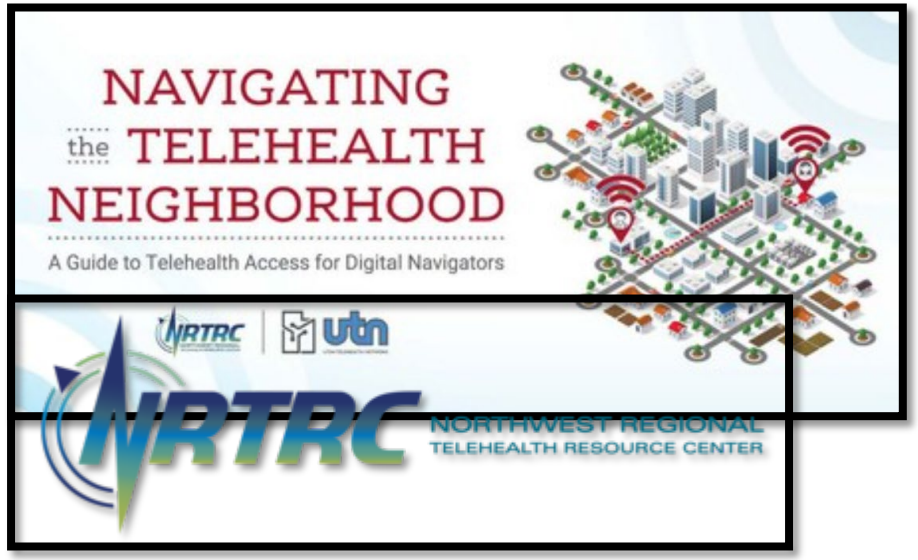
CTN community TECH NETWORK

**DIGITAL EQUITY AND HEALTHCARE**

This course is designed to empower digital navigators who work in a healthcare or wellness setting.

NORTHSTAR Take an Assessment

Accessing Telehealth Appointments



# Models from Adjacent Professions

| Field | Resource | Relevance | Organization |
|---|---|---|---|
| Patient Navigator | Oncology Patient Navigator Training: The Fundamentals<br>Enhancing Oncology Model | Free self-paced training offered for CME credit.<br>Health Equity Plan required; Monthly Enhanced Oncology Services payment; requires ePROs; encourages community partnerships | George Washington University School of Medicine & Health Sciences; also CO, NY<br>CMS EoM |
| CHW | Arizona CHW Resources<br>CommunityCares | Shows how CHWs address common health concerns<br>Medicaid pays for closed loop referral system and CHWs in CBOs | Arizona CHW Association<br>Arizona Health Care Cost Containment System (AHCCCS) |
| Peer Support | National Model Standards for Peer Support Certification | Peer support could include digital inclusion measures | SAMHSA |

# Health Sector Guidance re Digital Equity

Evidence- and Consensus-Based
**Digital Healthcare Equity Framework**
A PRACTICAL GUIDE FOR IMPLEMENTATION

The advancement of digital healthcare technologies has resulted in many viable solutions that can improve healthcare delivery and outcomes. But all too often, the designers and implementers of these technologies have not intentionally considered the unique needs and capabilities of all applicable patient groups. Omitting equity considerations throughout the lifecycle of digital healthcare technologies can create new or exacerbate existing healthcare disparities.

This guide offers technology developers, health plans, and healthcare providers a step-by-step path for implementing the Evidence- and Consensus-Based Digital Healthcare Equity Framework so they can intentionally consider equity across all phases of the digital healthcare lifecycle for patient-facing and clinician-facing healthcare solutions involving digital technologies.

GETTING STARTED!

- What's the Problem
- About the Framework
- Components of the Framework
- Implementing the Framework
- Using the Guide
- Steps for Digital Healthcare Developers and Vendors
- Steps for Health Systems, Health Plans and Clinical Providers

AHRQ Agency for Healthcare Research and Quality

1

## REAL-WORLD EXAMPLES

- Provide continuous quality technical support for patients with different technical skills and levels of eHealth literacy.[11,38]
- Partner with experts to identify potential community members who are excluded, are not participating, or are not benefiting from the new solution at desired rates or at the same rates as others.[11,38]
- Acquire and implement applications and online content to enable and encourage self-sufficiency, participation, and collaboration among those users.[11,38]

# 1/2024 CMS Medicare Advantage Plan Digital Health Education Mandate

…to “establish procedures to identify and offer digital health education to enrollees with low digital health literacy to assist with accessing any medically necessary covered benefits” that are available offsite.

AGING WELL · MEDICARE

BY RICHARD EISENBERG
June 2, 2023 at 7:00 AM EDT

FORTUNE Well.
PRESENTED BY CVSHealth.

**Many people on Medicare lack internet access and digital literacy, and it’s harming their health. How some groups are addressing the problem**

CFR Title 42, Ch IV-B,/part-422

# CMS Health Equity Strategies

Rewarding Excellence for Underserved Populations (REUP)

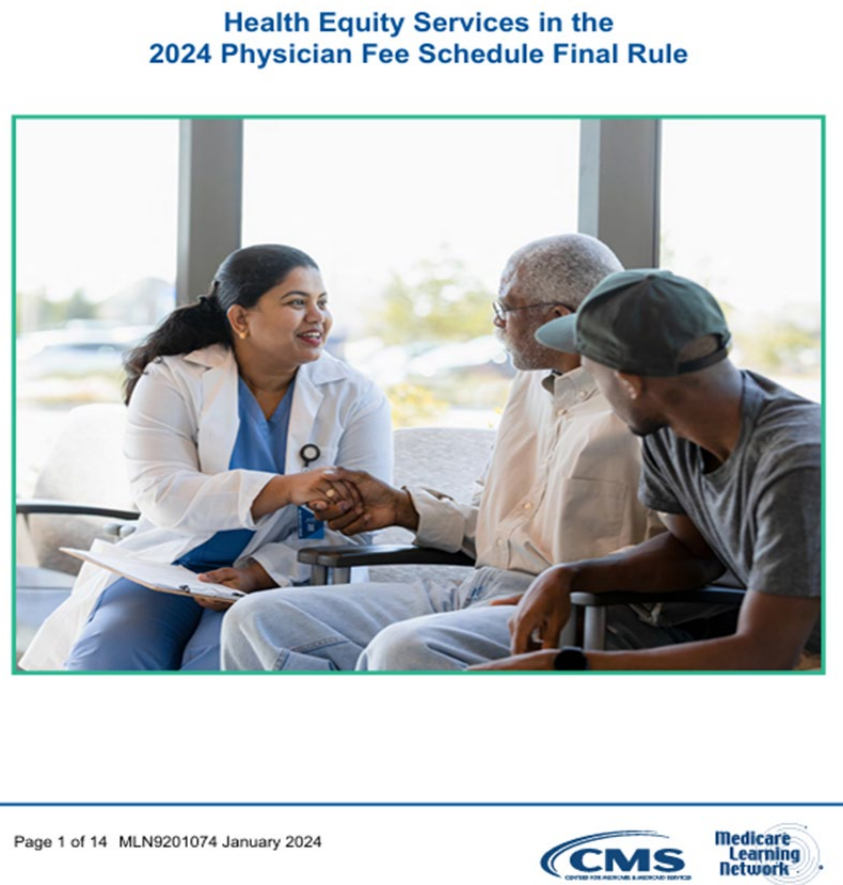
Address HRSN

- SDOH Risk Assessment
- Community Health integration
- Principal Illness Navigation

Caregiver Training Services

Workforce Training

Reporting Social Drivers of Health




[CMS Health Equity Fact Sheet]
[CMS MLN 2024 Physician Fee Schedule Final Rule]
[Mapping Medicare Disparities Tool]

# Thank You!

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