



Digital Equity & Inclusion in Healthcare

Designing a Systematic Approach

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Can you have

Health Equity

Everyone has a fair and just opportunity to be as healthy as possible¹

When this is present?

The Digital Divide

Uneven & unequal access to modern technology and internet

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The Digital Divide

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Measuring the Digital Divide Across the Nation; Reporting Discrepancies Exist



FCC

indicates that broadband is not available to 19M people in the U.S.

Issues with the FCC data:

- + **Data collection too broad**—asks providers if they are “*providing or could... without an extraordinary commitment of resources provide broadband service to an area.*” If the answer is yes, the area is considered covered.
- + **Uses census blocks**—if broadband is delivered to any customer on the block, the entire block is considered covered. There are 11.2M census blocks, but 150M parcels in the country.

BroadbandNow

estimates 42M, or 13% of Americans can't purchase broadband internet due to financial, geographic and service limitations¹

Microsoft

data indicates that 157.3M people in the U.S., or 48%, do not use the internet at broadband speeds²

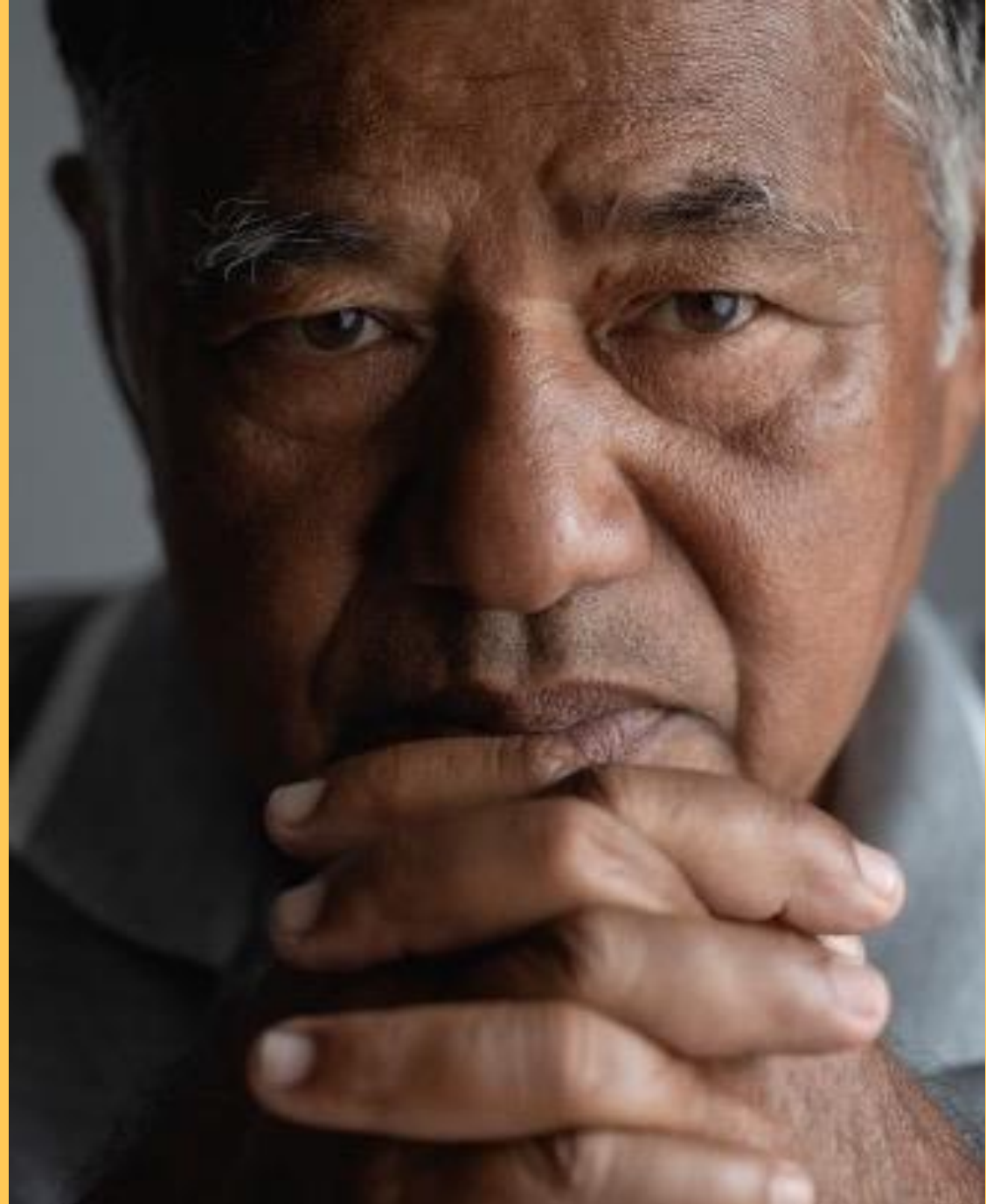
1. <https://broadbandnow.com/research/fcc-underestimates-unserved-by-50-percent>

2. <https://blogs.microsoft.com/on-the-issues/2019/04/08/its-time-for-a-new-approach-for-mapping-broadband-data-to-better-serve-americans/>

Lack of Broadband Access Leaves People Behind in Our Digital World



*In 2015, **43%** of those surveyed
in a Pew Research report said
that not having home broadband
was a major disadvantage in
accessing health information.*



Vulnerable Populations



Age

Adults over the age of 65 had lower computer use and broadband subscriptions.



Race

Black (non-Hispanic) and Hispanic (any race) smartphone usage more prevalent than laptop, desktop or tablet and less likely to have broadband internet subscription.



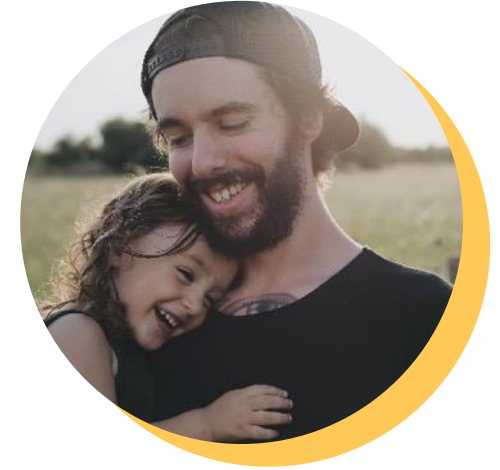
Educational Attainment

Of adults with less than a high school degree, only a small percentage have access to the internet.



Living Location

Those who live in non-metropolitan / rural areas are limited in the use of technology due to broadband access connectivity issues. This is also true in urban areas.



Income

Those whose household income is less than \$25,000 report lower level of technology usage.



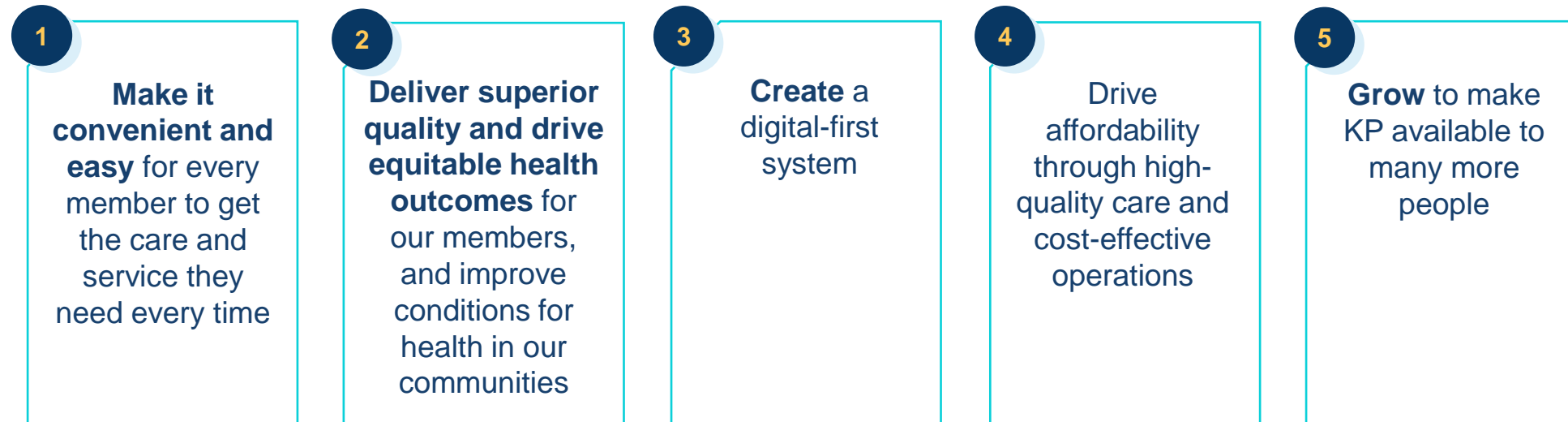
How We Are Approaching the Digital Divide at KP

Digital equity is a state in which all have the information technology capacity needed for full participation in our society, democracy, and economy.

Digital inequities can impact all social determinants of health, not just access to and quality of healthcare.

Kaiser Permanente's Strategy

A high-quality, more affordable, consumer-first, responsive KP — with more people and communities benefitting from our leading model. Inclusive of these 5 pillars:



Foundational commitments

People, communities, equity, and leading as one enterprise

Our Approach to Digital Inclusion

Drive Adoption

Awareness campaigns

Digital resource marketplace

Orientation program

Enable Use

Accessibility / usability of digital platforms

Refined digital care delivery

Tailored tech support

Learn & Inform

DE policy strategy

DE research efforts

DE data analytics



Creating a Digital Equity System

Lived experience research

Deeply immerse in the lives of those facing digital barriers and inequities to identify real needs

Combine internal and external data

Use both member-and community-level data to identify pattern and opportunity

Pilot initiatives

Deploy, test, and learn what works and what to measure with members in need of digital resources today

At Kaiser Permanente

Enable all to fully participate in the digital-first world should they choose to do so.

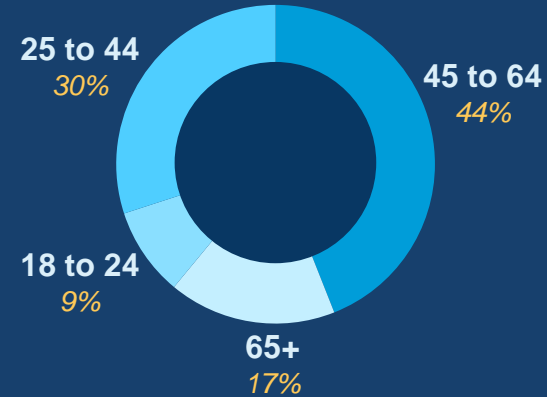
Recruiting for Digital Equity

Sample Size and Methods

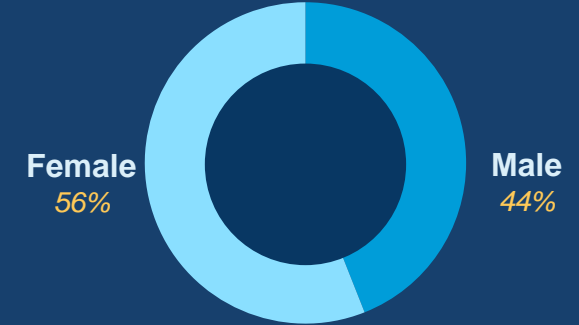
Ethnography was done in partnership with Public Policy Lab

- 25 Participants engaged
- 25 Diary studies
- 10 Semi-structured interviews
- 8 SMEs engaged
- 510 Unique data points

Age



Gender



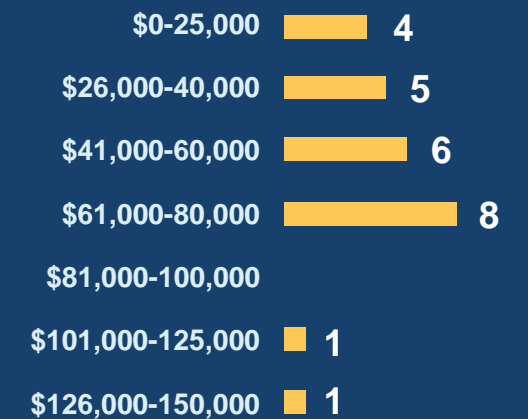
Preferred Languages



Ethnicity

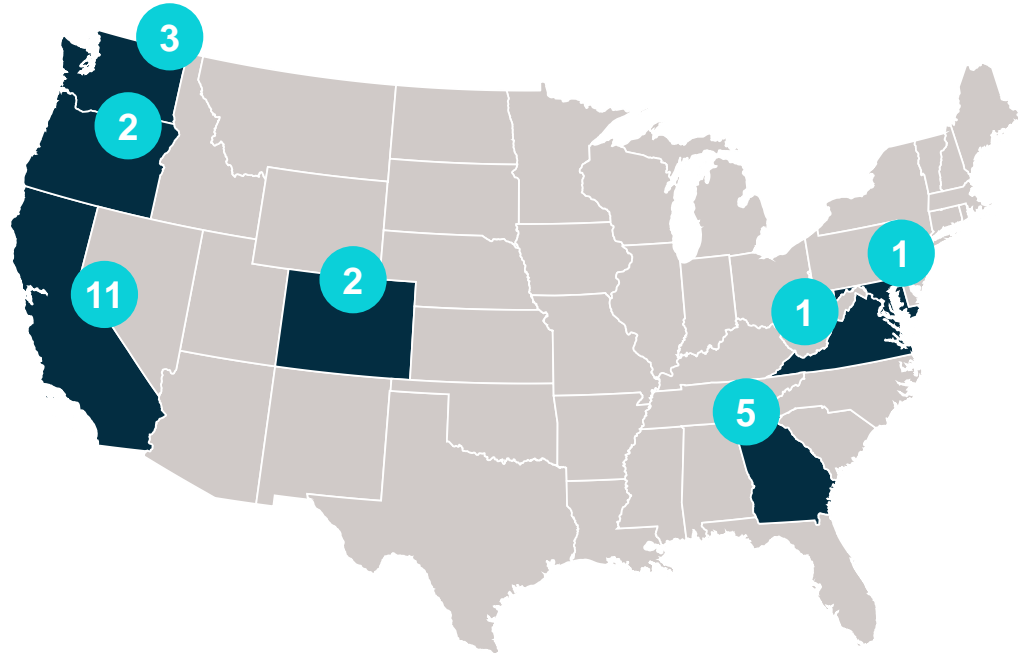


Household Income



Recruiting a Diverse Participant Pool

Study participants across the country, representing a variety of health statuses, and digital capability.



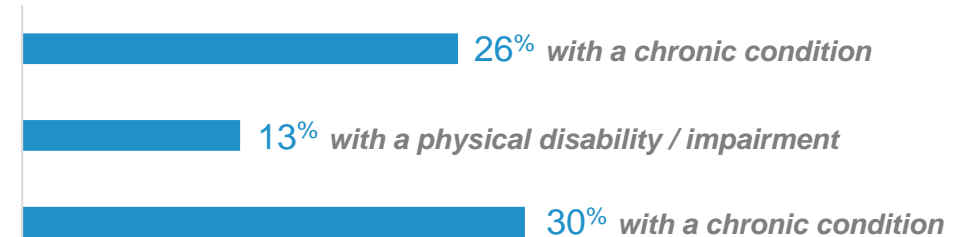
How Internet is Accessed

| | |
|-----------------------|----|
| Wifi: Federal Subsidy | 2 |
| Wifi: Nat'l Provider | 17 |
| No Wifi at Home | 4 |
| Other | 2 |

How Healthcare is Paid For

| | |
|---------------------|----|
| Kaiser Permanente | 10 |
| Medicare / Medicaid | 4 |
| Out of Pocket | 2 |
| Private (non-KP) | 5 |

Health Status



- Conditions Mentioned**
- Bipolar
 - Depression
 - Diabetes
 - Fibromyalgia
 - Obesity
 - Osteoarthritis
 - Prostate Cancer

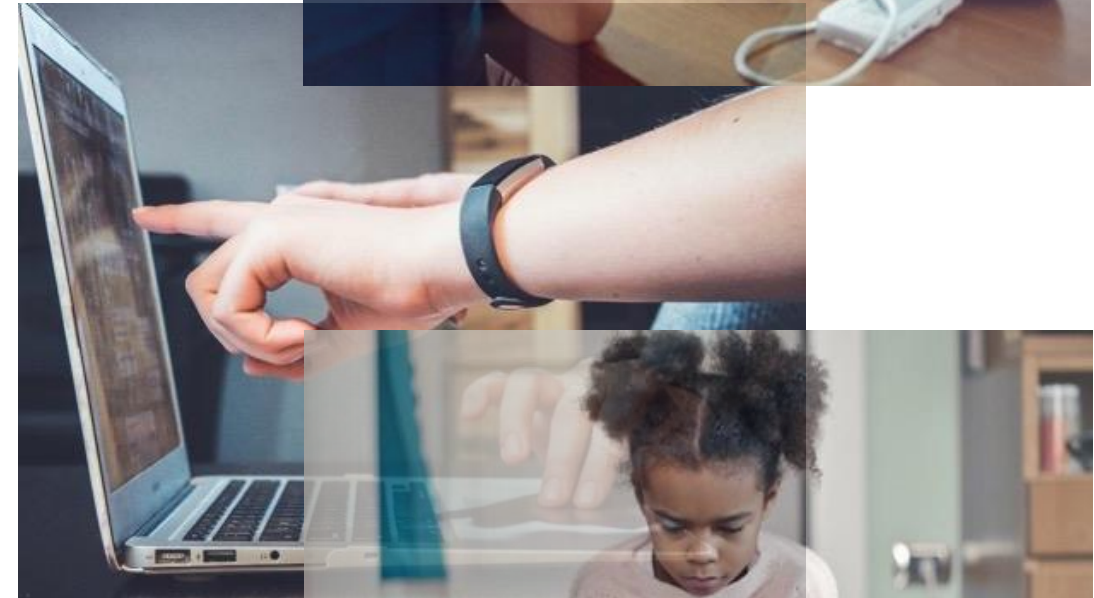
The Needs

Enablement & Support

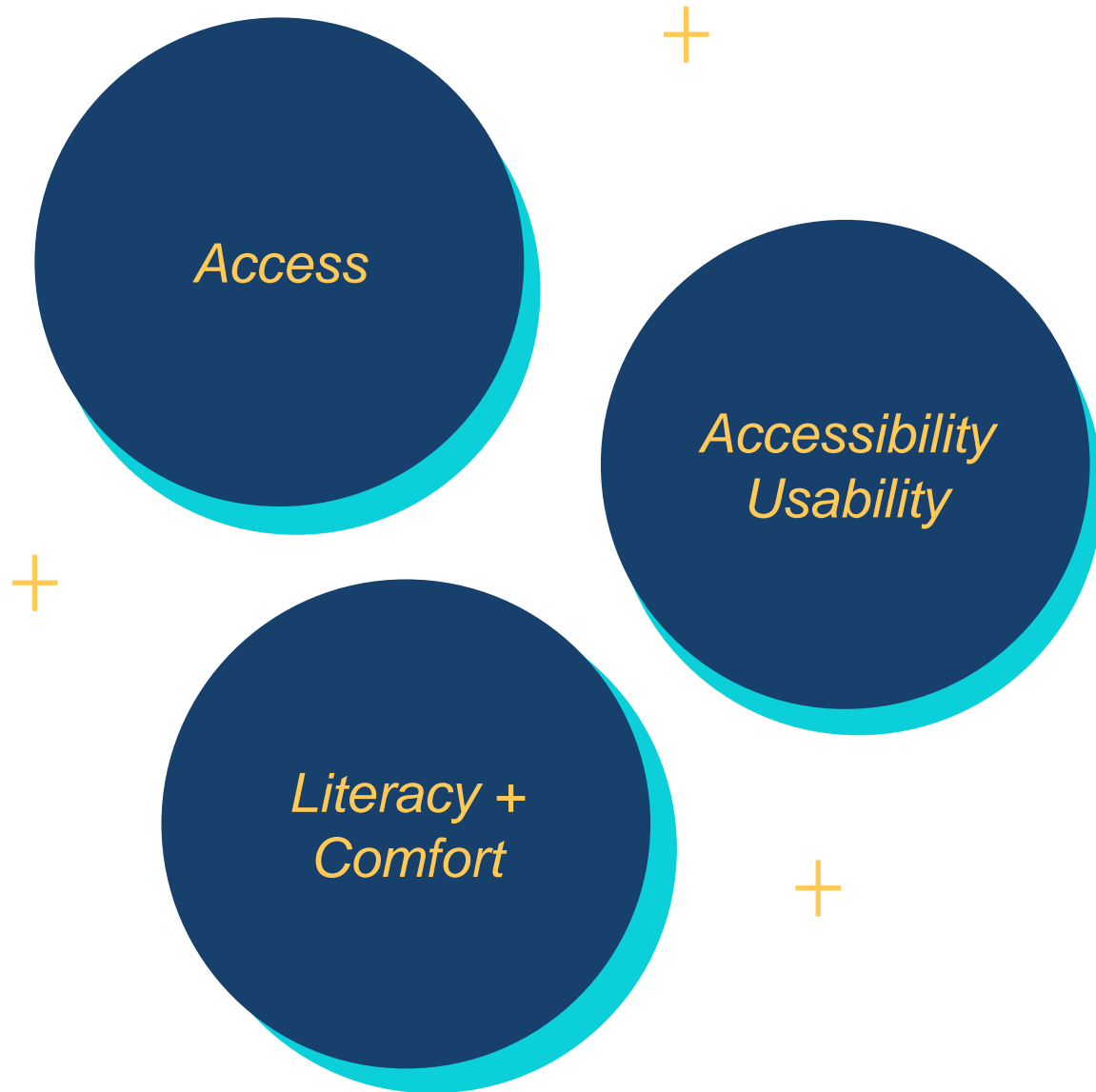
- 1 I need the **ability to access** digital tools and services.
- 2 I need **tools and services** to accommodate a range of access situations.
- 3 I need my unique **needs to be supported**.
- 4 I need a **lower barrier to entry** for digital tools and services.
- 5 I need **support** when things don't go well.
- 6 I need my **support network to be empowered**.

Empowerment & Confidence

- 7 I need to **feel self-sufficient** when engaging with digital tools and services.
- 8 I need to **have a choice** in how I receive care.
- 9 I need to **feel safe and cared for** when engaging with digital tools and services.
- 10 I need to **feel heard and understood** when engaging with digital healthcare services.



The Problem



Though the access barrier is still large, it isn't the only thing standing in the way of digital adoption.

- + Those with disabilities are forced to find workarounds to using platforms that have few accommodations.
- + Seniors must learn to use complex platforms that lack basic usability features.
- + Those who are less tech-savvy live with frustration and even fear.

And even with access, accessible and usable platforms, and adequate digital skills, some people remain uncomfortable using digital tools and services.

A few of our learnings around

Access

Literacy and Comfort

Accessibility and Usability

Access

Many people weigh cost vs. the value of having broadband at home.

While people admit the value of going online, sometimes it doesn't seem worth the cost.

"I work so many hours. If I am going to pay for internet, I want to be home to enjoy it."

– Non-KP Member, 43

Spotty internet is problematic.

Had a video visit with their therapist but the internet was slow, didn't connect well, and they couldn't reconnect.

– KP Member, 51

Poor mobile reception pushes people into paying for both mobile and fixed broadband.

Has bad cell reception at home and will at times use wifi on their phone as a result. This, they feel, defeats the purpose of paying for unlimited data.

– KP Member, 45

Affordability (rather than infrastructure availability) is the main driver of broadband access for KP members.



1. UCDA / Dataset: NDI + DAR
2. Closing the K-12 Digital Divide in the Age of Distance Learning
3. Jonathan Sallet, Internet policy scholar

Literacy &
Comfort

People need a bit more guidance and feedback to effectively adopt and engage with digital services and tools.

People are motivated to learn new things, but the initial hurdle is a significant one.

“I would just like to learn the basics, and there’s a little apprehension on my part because I feel like I’m going to make a mistake and not know how to recover.”

–Non-KP Member, 70

Trustworthy, personal cues about data privacy, and security are important.

“I’m skeptical of websites because I’m worried about identity theft. I just look for that little lock at the top of the screen. If I don’t see that, I won’t shop on that website.”

–KP Member, 45

There is a lack of understanding about what can be addressed through virtual care and what is best left to in-person visits.

“I have been trying to schedule an appointment with my doctor for 2 years now, and it’s hard to make that happen because everything is online. And I don’t know if a doctor could take my blood pressure online. There are things that they can’t do online that they can do in person.”

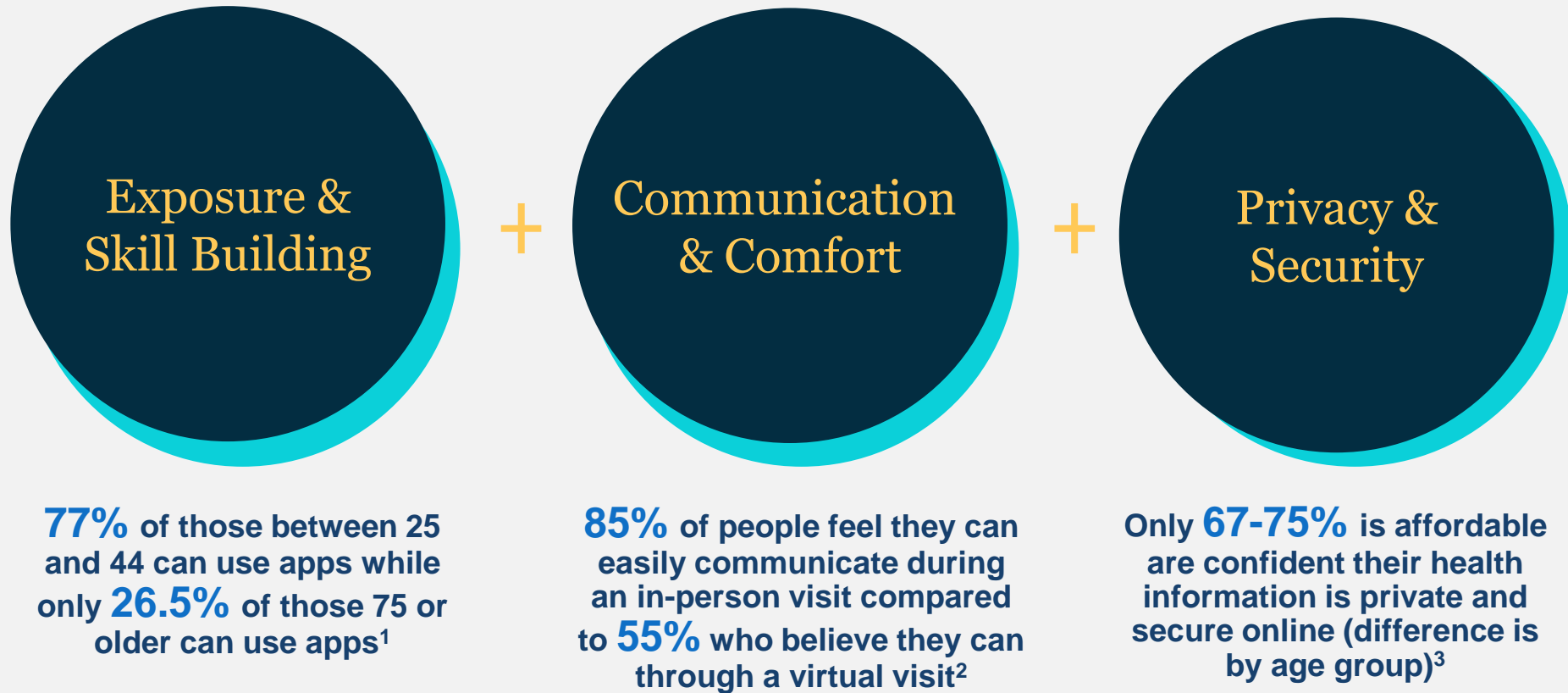
–KP Member, 70

Digital offerings should replicate the warmth of in-person services and allow for more of the back and forth that is possible face-to-face.

“[My therapist and I] started meeting over the phone. But then I started getting bothered by it because—I’m wondering if she’s even paying attention. There were a couple times where I had to say, ‘Are you still there?’ and ‘Are you listening?’”

–Non-KP Member, 43

Exposure is necessary to gain digital skills, communication needs must be met to instill comfort, and privacy and security matter.



1. Use of DIT, HIA Preferences, PKNC ages 25-90, by age group and sex, 2017 Nancy Gordon (internal)
2. KPWA Exploring Virtual Healthcare and Underserved Populations
3. KPWA Telehealth Survey February 2021, 1945 participants

Marginalized populations constantly face a full range of emotional and physical barriers in the digital space.

When accessibility is not supported, people spend extra time catching up and getting issues resolved. They can feel voiceless and undervalued.

"I think the experiences of those with disabilities online, or at least their needs and desires, are not all that different from somebody who doesn't have a disability. "

–External SME

A person's network can increase access to information and help with navigation; the network also provides emotional support.

"It made me feel good to go online in an anonymous setting and forums that are specific to health conditions and topics. I learned so much about my own condition and felt good knowing that I wasn't the only one."

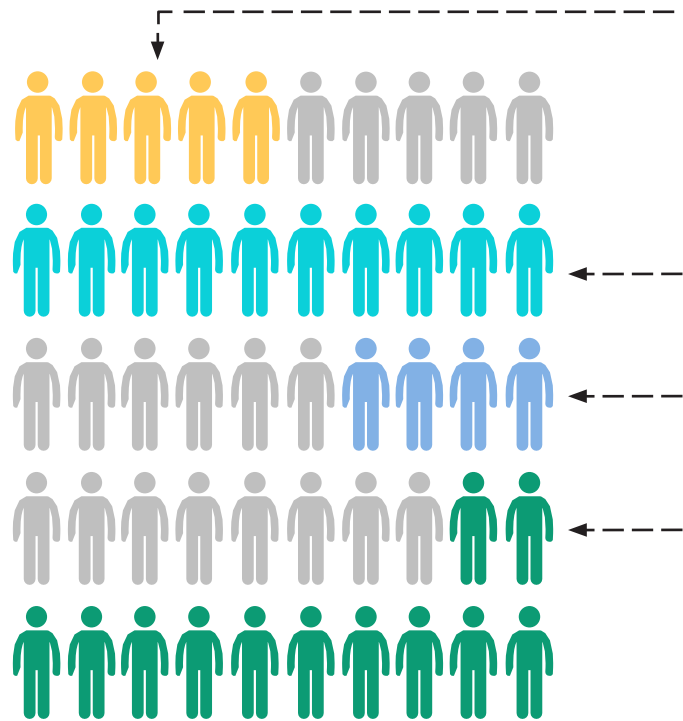
–Non- KP Member, 43

Older members have strong opinions about what works and what doesn't.

"If they would not keep changing the look on their webpage. Getting used to find something, then it gets moved makes the process difficult."

–KP Member, 75+

Accessibility and usability gaps can impact anyone, but they make a big difference for people with disabilities, older people, and support networks. And smartphones are the go-to device.



10.5% of KP members have a disability. If 15% of them never go online that's 200,000 members.¹

More than **20%** of Americans are caregivers. They benefit from digital equity as much as members.²

7% of KP members have limited English proficiency compared to 4.8% nationally.³

Nationally **25%** of people over 65 do not use the internet. 15% of KP members between 65 and 79 don't use kp.org. That's about 140,000 digitally disadvantaged members.³

286.4

million sign-ons through KP mobile app in 2021⁴

195.7

million sign-ons through KP mobile browser in 2021⁴

1. KPWA Exploring Virtual Healthcare and Underserved Populations, Community Health Data Platform
2. May 2020, AARP Family Caregiving Research 2020 Report, Caregiving in the US 2020
3. Community Health Data Platform
4. KP.org Dashboard

What actions we're taking

The Systematic Approach

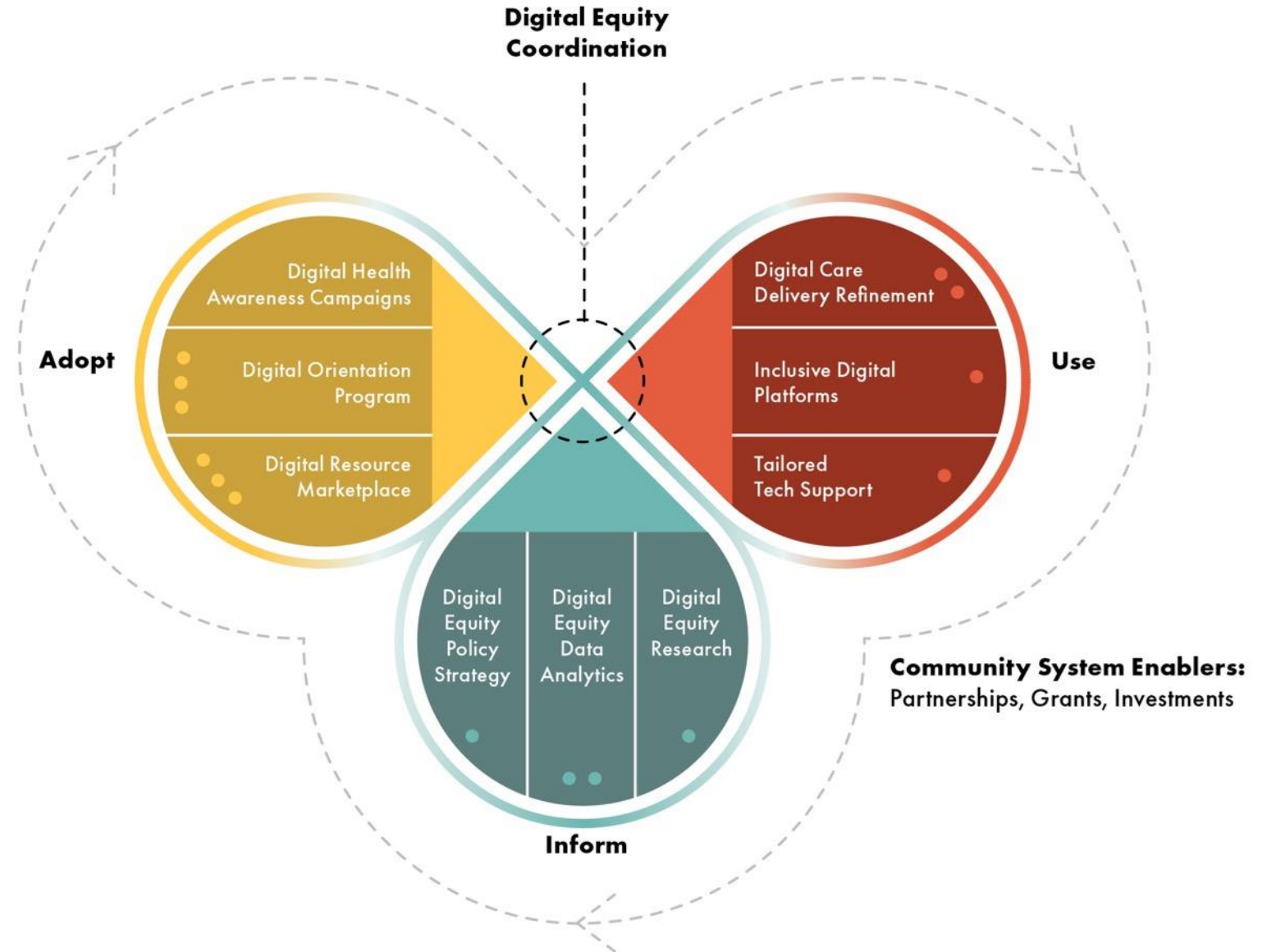
Priorities

Pilots

System Overview

Each prong contains 3 nodes, or primary activities, and a set of supporting and secondary activities called building blocks.

The system is supported by a DE Coordination entity at its core, and is made possible by Community System Enablers; which include partnerships, grants, and other investments.



The Priorities

Where and How to Start

- 1 Launch **national campaign**
- 2 **Expand Connections Call Center pilot** connecting pre-identified members to federal subsidies (following slides)
- 3 Begin **building a DE data- and knowledge-base**
- 4 Assess existing member-facing and provider-facing **digital education content**, fill gaps
- 5 Assess current **portfolio of investments**
- 6 Embark on **policy approach process**
- 7 Outline **grant strategy and partnership approach** nationally and by region
- 8 Initiate **tech support** for members with disabilities
- 9 Update **digital platform standards and processes**
- 10 Contribute to internal **Consumer Excellence work**



Digital Equity Connections

Program: Build the evidence on effective ways to address digital equity through an outreach campaign for 1) broadband [device and internet] access and 2) assistance with digital engagement through phone calls. The initiative will connect individuals to federal programs (ACP and Lifeline) and assist them in accessing kp.org resources, such as making an appointment or choosing a primary care physician.

Affordable Connectivity Program [ACP]: Federal program that provides a discount of up to \$30/month discount for broadband services for eligible households. Many service providers offer plans for no cost after discount.

Lifeline Program: Federal program that provides a discount of up to \$9.25/month on broadband internet service for eligible households.

Population: Patients who have indicated financial or broadband needs.

Duration: September - December 2022

1

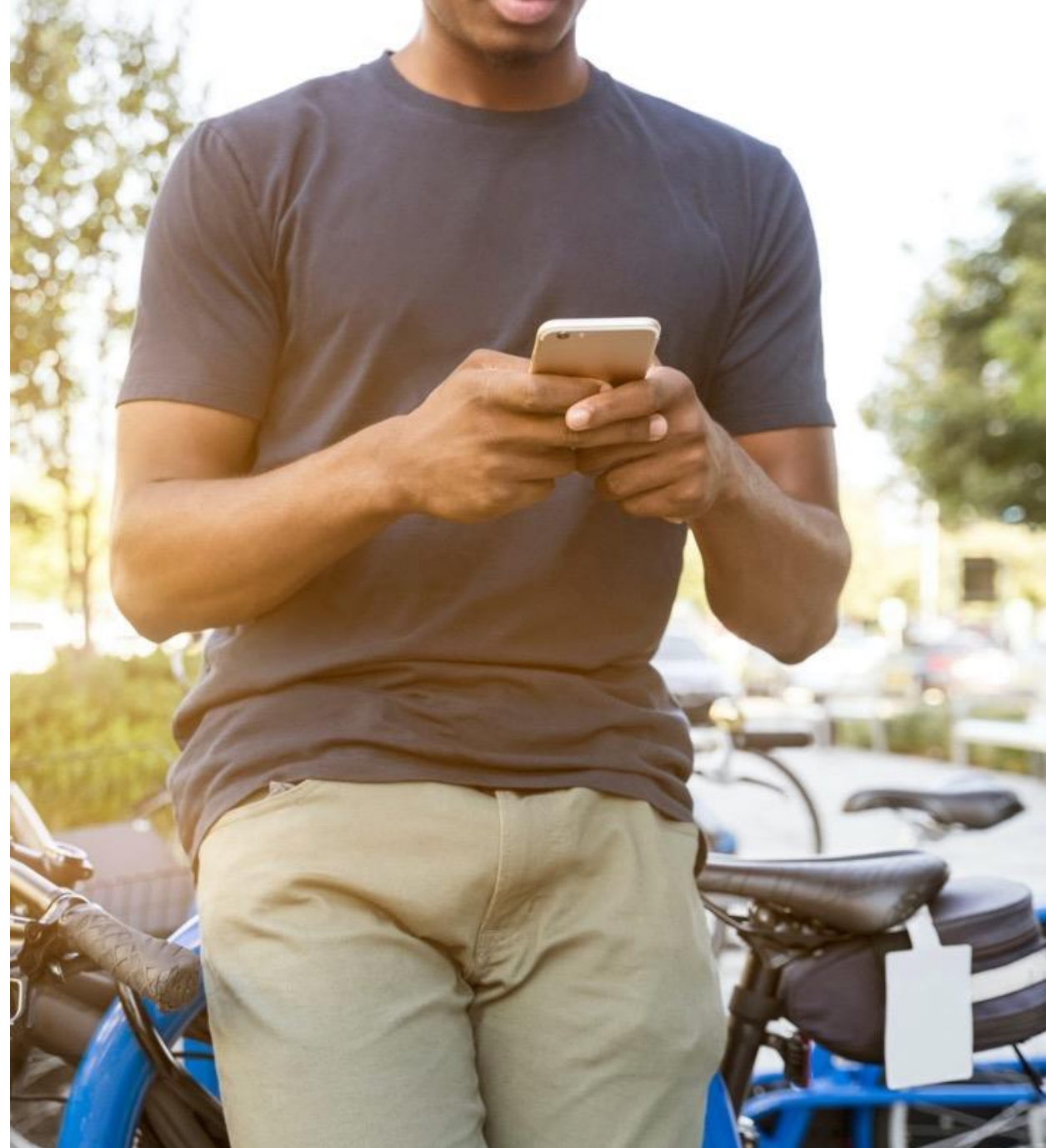
Address broadband access:

- + Affordable Connectivity Program
- + Lifeline Program

2

Address barriers to engagement:

- + Assist in utilizing and navigating digital resources that support health



Tested Multiple Approaches to Outreach



Call Center

Trained Connections
Call Center [CCC]
specialist proactively
calling members
screened positive for
financial/utility needs.

Reach: **800**



Automatic Dials

Calls to members with
previous interaction with
the CCC to inform about
the ACP and connection
to call center specialist.

Reach: **3,000**



SNAP Texting

SNAP texting campaign
layered with ACP
program outreach.

Reach: **196,000**



Social Media & Email

Social media campaign
for community resource
directory including
financial assistance
resources like the ACP.

Reach:
5M

Email/Text Campaign:
7M

Initial Pilot Results

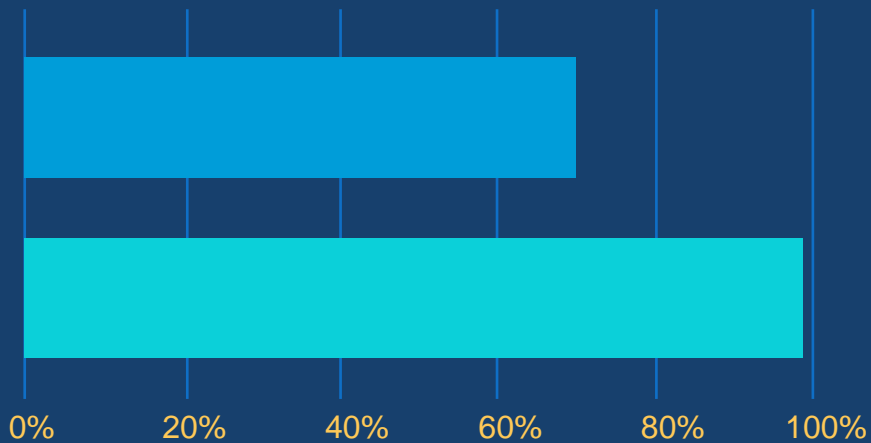
September 2022 – December 2022



40.5%
of identified patients
successfully contacted
by call center specialists.



74.1%
of the members referred during
the initial call successfully
scheduled for follow-up call with
CCC for training in use of virtual
kp.org tools and services.



69.5%
of the contacted patients were deemed likely eligible for
programs and successfully referred to 3rd party vendor.

98.2%
of the contacted patients were interested in learning
more about the programs.

**It is
Kaiser Permanente's
responsibility to
meet the last
member at the last
mile; closing health
gaps by opening
digital doors.**



Three Key Take-Aways

1. **Digital equity is bigger than the digital divide.** Consider elements beyond access that impact a person's connection and choice.
2. **Enabling digital literacy, accessibility and usability, and comfort with technology are critical to ensuring a successful digital interaction.** This requires technical support, app/UX design, and approachable communication about not just *how*, but *why* digital healthcare can be beneficial.
3. **Steps towards enabling digital equity span all departments within an organization as well as outside partners and entities.** Start small, make connections, keep building.



Questions?

Please be sure to complete the session evaluation!





David Grandy

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Kaiser Permanente
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David's contributions to healthcare span more than 25 years, beginning with a progression of health system leadership positions, followed by a career in management consulting focused on innovation.

David's work as a thinker, teacher, explorer and partner has taken him to five continents as a strategic advisor in board rooms and cabinet rooms alike. He has worked with world-renowned organizations like Google, GE, MD Anderson, the American Medical Association, the American Hospital Association and the US Department of Defense, as well as with various international healthcare entities like numerous Canadian Ministries of Health, Jordan's Royal Medical Service, and the National Health Service of Trinidad and Tobago. David also serves on the SHSMD Advisory Board.

At KP, David works to transform our delivery system. His team's work includes efforts to address food security, adverse childhood events, personalized digital health, digital equity, care in the home, excellence in cancer care and other enterprise-wide initiatives. During the COVID-19 pandemic, David led KP's alternative PPE production initiative, design and implementation of a Home Prevention Program, and a vaccine confidence research effort picked up by the White House and CDC. He previously co-led the Innovation Workstream for Governor Newsom's statewide Testing Task Force. Today, David is a key contributor to Risant Health, KP's value based care venture.



Caroline has been in the design, strategy, and innovation field for over sixteen years. Her career began in commercial architecture and design focusing on workplace, healthcare, and historical renovation projects.

Caroline Franz

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Caroline then pivoted into design strategy and investigation in the consumer-packaged goods industry as a team lead for S.C. Johnson's Home Cleaning and Food Storage divisions driving innovation for brands like Scrubbing Bubbles, Mrs. Meyers, Windex, Drano, and Ziploc. She has since revisited the architectural space as an innovation strategist for clients like the University of Michigan, AdvocateAurora Health, Health Quality Partners, Rush University Medical Center, Regional Health Partners of South Dakota, and community entities in Denver, CO, and Edmonton and Calgary in the Canadian provinces.

At Kaiser Permanente, Caroline has led design research and strategic visioning for projects looking at care in the home, preventing adverse childhood experiences, covid-19 response, and most recently, digital equity. She has facilitated workshops and presented work at institutions like the Cleveland Clinic Patient Experience Summit, the European Healthcare Design Conference, the US Health Care Design Conference, and the American Public Health Associate Conference. Her work has won design and innovation awards from Fast Company and Core 77 for both healthcare and community development.

Bibliography/References

The following sources are referenced in this work:

Top resources (external):

- + Pew Research
- + McKinsey
- + Agency for Healthcare Research and Quality (SDOHTP score)
- + American Community Survey
- + CNET Digital Divide article series
- + FCC Fixed Broadband Deployment dashboard
- + Advisory Board: Market scan of patients' virtual care journey, prepared for Kaiser Permanente, December 2021

Top resources (internal):

- + KPWA Exploring Virtual Healthcare and Underserved Populations Report
- + KPWA Telehealth Research on Disproportionately Affected Groups in Washington State, July 28, 2022
- + Competitive Assessment Q2 2021 Telehealth Report
- + 2022 Digital UX Survey Report
- + Data Analytics Datamart Monthly Metric Snapshot
- + kp.org

Other Resources

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