Digital Divide: View From Patients and Their Providers

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Growing technology advancements in recent years have led to a rise in digital dependency. Information and communication technology (ICTs) makes it possible for people to work, access information, and feel a part of society.[1] The issue is that a portion of the general public lacks the resources, skills and knowledge necessary to have access to and use ICTs. The term digital divide is defined as the differences of economic and social inequality in both access and usage of ICTs.[2, 3] Some population groups that are affected by the digital divide include uninsured, at or below 300% of the Federal Poverty Level (FPL), lack of internet access, etc. Demographics such as age, economic status and geography (rural vs. urban) also factor into the digital divide.

Among working age-adults in the United States, 27.5 million (13.9%) were uninsured in 2020.[4] This statistic shows that many uninsured Americans may struggle to afford their medications and other medical care. This also holds true for access to virtual care and digital health. Three factors of the digital divide that affect the uninsured population include information accessibility, utilization, and receptiveness. Many Americans don't realize what they have at the tip of their fingers compared to many who simply do not have the same digital access. People now consider their phones to be a daily necessity and are unaware of the large number of people who do not have smart phones with internet access. According to a 2019 survey, 20% of Americans with earnings below the FPL do not have internet access.[5] Figure 1 shows detailed 100% and below FPL who don't have internet access.

Almost 1 in 5 Americans living in poverty lack access to the internet at home

Share of people without internet access at home in 2019, by federal poverty level

3%	7%	14%	18%
400% or more FPL	200% – below 400% FPL	100% – below 200% FPL	below 100% FPL

Source: KFF analysis of the Census Bureau's American Community Survey, 2019 • Get the data • PNG

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Health System Tracker
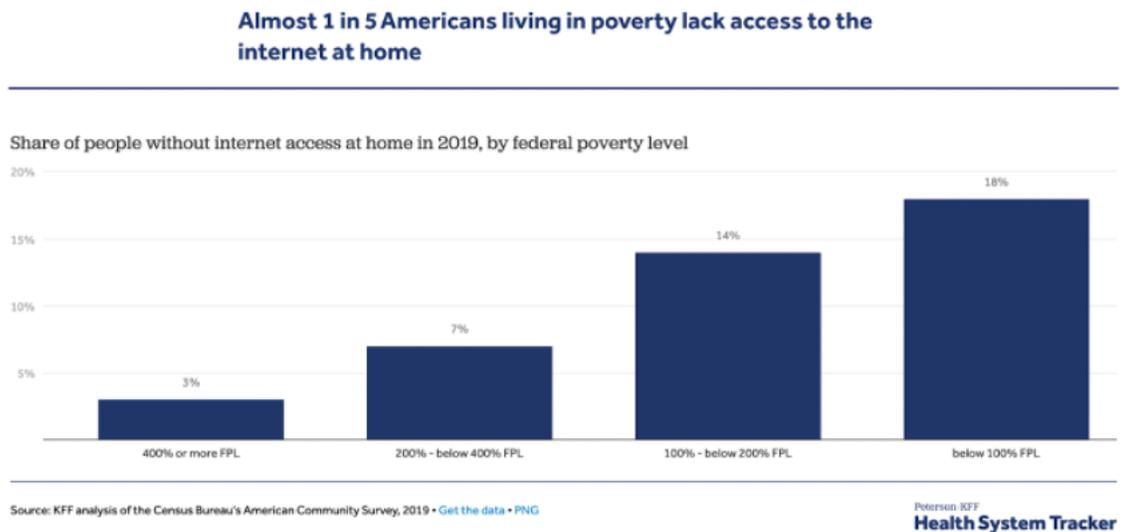
Figure 1: Individual without internet access by federal poverty level[5]

There is a further divide between uninsured patients. "In a nation with millions of uninsured families and shortage of health professionals, many of us turn to health-care apps and websites for accessible information or even potential treatment."[6] While health-care apps may be helpful for some patients, there is still a gap in access, particularly among the low income and uninsured population. In addition, health-care apps and websites are not a viable replacement for digital tools (telemedicine) that provide access directly to providers.

Dr. Sarah Gillard, PharmD, Program Manager at Wyoming Medication Donation Program (WMDP) shared

her insight from years of experience running the program. Dr. Gillard's WMDP is trying to reach those without insurance or reliable digital access by working with providers and health systems to complete enrollment to WMDP before the patient leaves the facility. Dr. Gillard has stated they have applications available on their website, however it has to be filled out manually because applications are not fillable online. Electronic submission is not equitable to those without internet access, computer, printer, or even a cell phone. This program provides an option for those who do not have access to the internet by sending a printed form and pre-stamped return envelope for patients that don't have access to printing or mailing. Applications are sometimes sent by providers and by case managers at discharge to make the application easier for patients. This is just one example of how WMDP helps bridge the digital divide.

Today, healthcare providers rely on phone calls and texting to contact patients. While there are many advantages to this , there have been twice as many disadvantages. Referencing WMDP, in their system, once the patient is accepted they must call back 7-10 days prior to refill and request a refill on their medications. Many of the patients in this program do not have access to a stable phone service. This creates communication challenges between patients and providers including: frequent phone number changes, limited minutes, phone disconnection due to cost, no voicemails setup and more.

Patients who are eligible to receive free medication from a charitable pharmacy still struggle to use full resources available in their communities. These resources include internet access, transportation, cell phone access, technology, etc. The digital divide is affecting the patients' health due to not being adherent to their chronic conditions. As a result, it can lead to more frequent hospitalizations and emergency visits.[7] Pharmacists and other healthcare providers providing free consultations and patient education can help patients who are affected by the digital divide. Educating patients (including digitally) about their illnesses helps them understand their disease and better maintain their illness resulting in better health outcomes.

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