



Internet as Medicine: The Importance of Digital Infrastructure for Health Care

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Internet as Medicine

- ▣ Health and health care are increasingly digitized
- ▣ Telehealth exploded during the COVID-19 pandemic
 - ▣ Telehealth utilization has stabilized at levels 38X higher than pre-pandemic
- ▣ Health @ home, using the internet of things, is on the precipice of broad expansion
 - ▣ Venture capital investment in digital health in 2020 is 3X greater than in 2017



POLL

Internet as Medicine: Social Determinants of Health

▣ Education

- ▣ Pandemic virtual-only schooling
- ▣ Homework completion
- ▣ Enrichment activities

▣ Employment

- ▣ Applying for work
- ▣ Accessing remote work opportunities
- ▣ Developing digital skills for higher wage work



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Digital Deserts

- FCC estimates 21.3m Americans (6.5% of the population) lack access to broadband internet
 - Advocates think the number is closer to 42m
- FCC only requires 25Mbps download and 3Mbps upload speeds to count as access
- No other infrastructure demonstrates such disparities

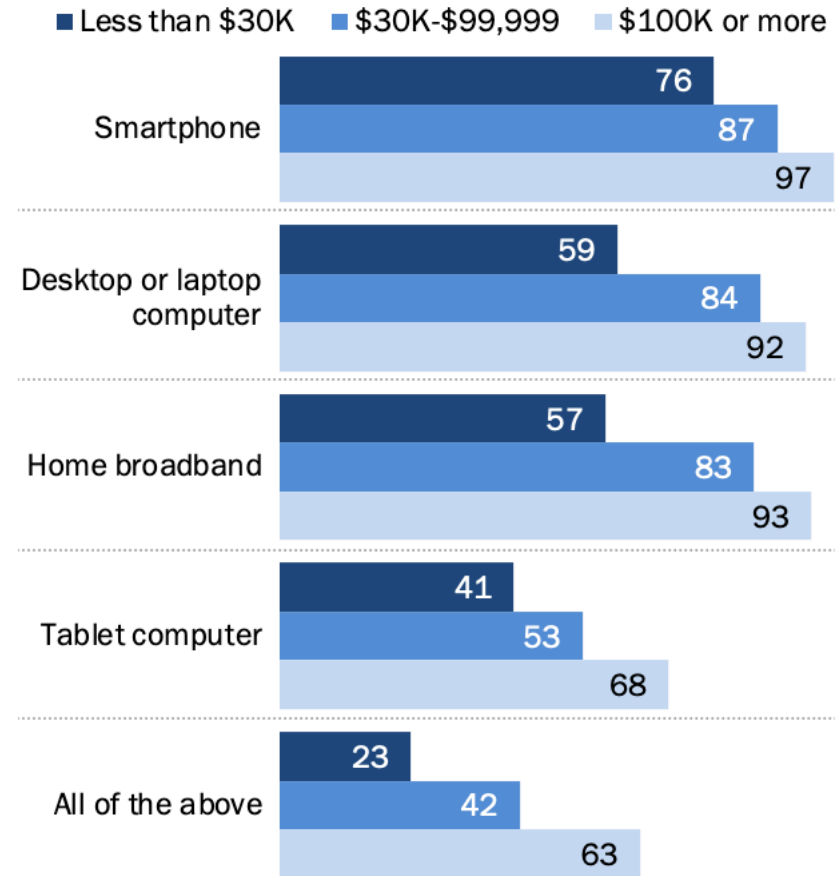


Digital Deserts

- ❑ Rural areas and communities of color disproportionately impacted
- ❑ Rural households tend to lack infrastructure while urban households cannot afford access

Americans with lower incomes have lower levels of technology adoption

% of U.S. adults who say they have each of the following, by household income



Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted Jan. 25-Feb. 8, 2021.

PEW RESEARCH CENTER

Barriers

- Cost: Americans pay a lot for internet access
 - Limited competition due to government policies to allow significant consolidation
- Lack of digital skills: Americans are not well trained on how to use the internet
- Access: Americans often do not have the infrastructure to access broadband internet
 - Very expensive to set up a broadband network
 - Last mile issue in rural areas



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Governance of the Internet

FCC has some authority to regulate broadband access with self imposed limitations

Federal Communications Commission

FCC 17-166

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

Restoring Internet Freedom

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WC Docket No. 17-108

DECLARATORY RULING, REPORT AND ORDER, AND ORDER

Adopted: December 14, 2017

Released: January 4, 2018

By the Commission: Chairman Pai and Commissioners O’Rielly and Carr issuing separate statements;
Commissioners Clyburn and Rosenworcel dissenting and issuing separate statements.

Title II of the Communications Act of 1934

- ❑ FCC has authority to regulate the charges, practices, classifications, and regulations of “common carriers”
- ❑ Common carriers must
 - ❑ Furnish communication service upon reasonable request
 - ❑ Refrain from unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services
 - ❑ Charge only just and reasonable rates
- ❑ Section 706: FCC must “encourage the deployment of a reasonable and timely basis of advanced telecommunications capability to all Americans”



Title II of the Communications Act of 1934

- ▣ Title II does not extend to *information services*
 - ▣ Offering a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications
- ▣ Title II applies to commercial mobile services but not private ones
 - ▣ Two way communications by radio initiated or received by a mobile device



Title II and Broadband

- ▣ 1998 FCC Order: DSL is a telecommunications service
- ▣ 2002 FCC Order: Cable broadband is an information service
 - ▣ *National Cable and Telecommunications Association v. Brand X Internet Services* (2005): SCOTUS determined that whether internet is an information or telecommunications service depends on “factual particulars”
 - ▣ FCC subsequently defined mobile and wireless broadband as information services



Title II and Broadband

- 2002-2018: FCC often sought to regulate broadband, with limited results
 - *FCC v. Independent Telephone and Telecommunications Alliance*: D.C. Circuit ruled that FCC could not rely on Section 706 to promulgate anti-discrimination and anti-blocking rules
 - In response the FCC reclassified broadband as a “telecommunications service” and mobile broadband as a “commercial mobile service” to subject both to common carrier regulations
 - D.C. Circuit drew upon SCOTUS precedent to uphold FCC’s reclassification



Title II and Broadband

- ❑ 2018: FCC reclassified broadband once again as information service and mobile broadband as private mobile service
 - ❑ Also rejected Section 706 as source of regulatory authority
- ❑ D.C. Circuit upheld the FCC's decision but remanded it to the FCC for consideration of its impact on public safety



Federal Efforts to Support Access

- ❑ Telecommunications Act of 1996 amended definition of “universal service” to include high speed internet
- ❑ FCC established the Universal Service Fund
 - ❑ Connect America Fund for rural areas
 - ❑ Lifeline Fund for low income areas
 - ❑ Two funds for school and rural health care



Federal Efforts to Support Access

- American Recovery and Reinvestment Act of 2009 allocated \$7.2b for broadband initiatives
- American Rescue Plan Act allocated \$20b for broadband programs
 - States and local governments manage and encouraged to create non-profit ISPs
 - Funds earmarked for schools and libraries to establish connectivity
 - Internet minimums: 100Mbps
- Infrastructure bill to add \$65b



Federal Efforts to Support Access

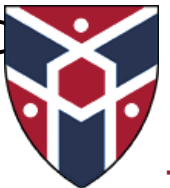
■ Pandemic Initiatives:

- Expanded capacity by allowing use of unused radio spectrum
- Waived regulatory requirements for telehealth
- Pledge for providers not to impose late fees or disconnect services due to inability to pay



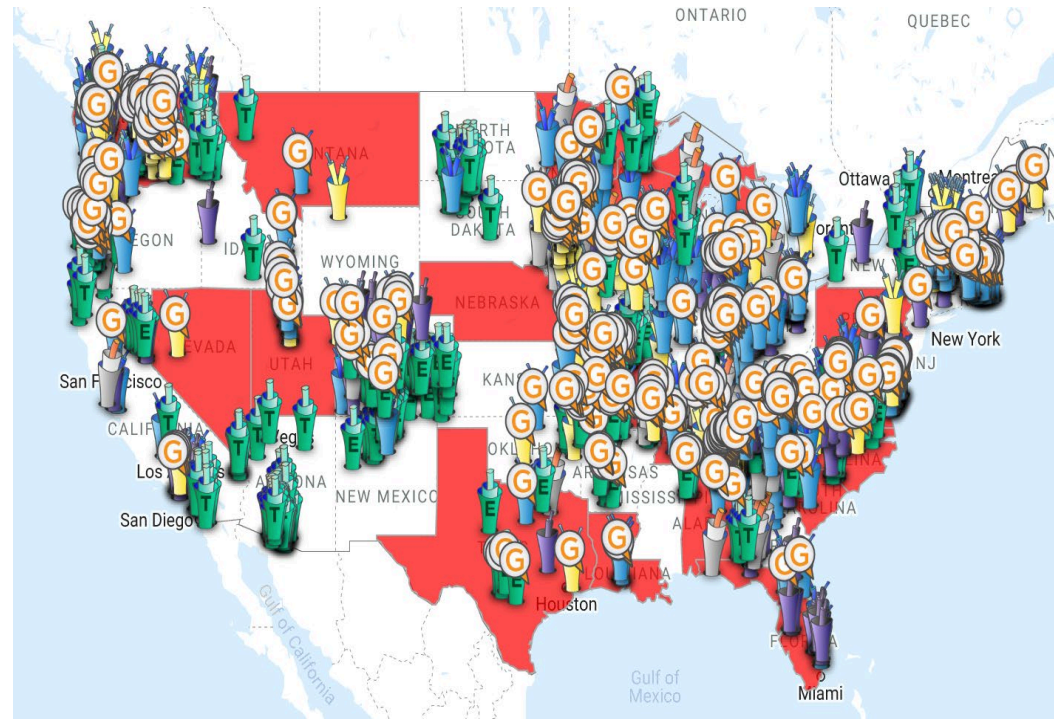
State Efforts to Support Access

- ❑ Tend to be focused on last mile efforts with a goal of universal access
- ❑ Some states (CA, MN) have articulated their goals in statutes while others have broadband plans
- ❑ States increasingly are establishing dedicated offices or agencies (MN, CO, WI)
- ❑ States are: supporting municipal projects (ME), including broadband in electric utility easements (CO), tapping into telephone funds (CA)



State Preemption of Municipal Networks

Many states are unfriendly to municipal networks, one potential solution to problems of access

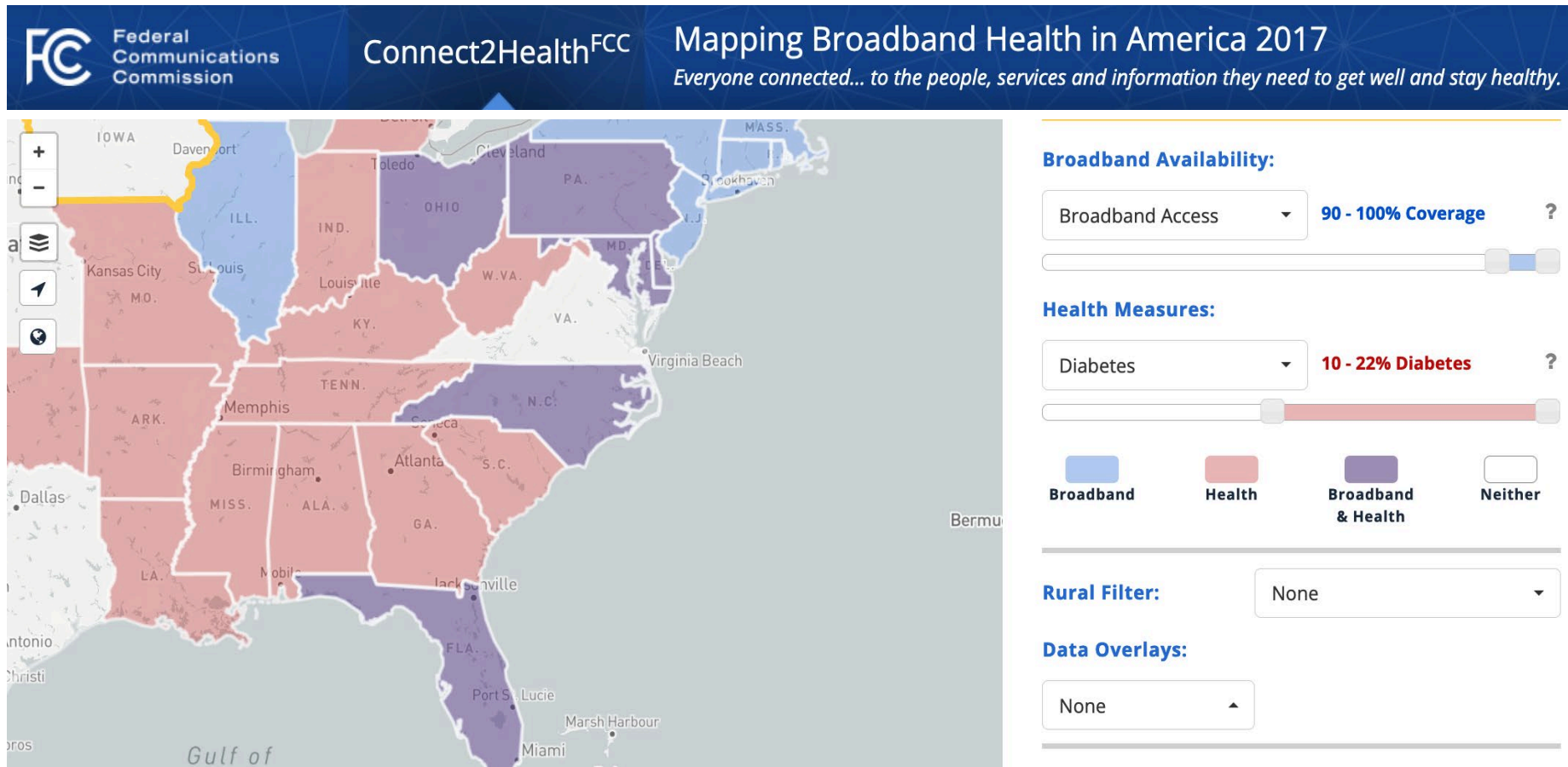


In re City of Wilson: Sixth Circuit determined that Section 706 of the Telecommunications Act of 1996 did not contain “a clear statement authorization preemption” of state municipal network bans



Digital Infrastructure is a Health Care Concern

Unquestionable that access to broadband is a health issue



Digital Infrastructure is a Health Care Concern

- ❑ Health care advocates should keep digital infrastructure issues on their radar
- ❑ Health law and policy scholars should explore:
 - ❑ FCC's classification of broadband networks
 - ❑ State and municipal efforts to promote and/or block digital infrastructure projects
 - ❑ Whether internet as medicine justifies/compels more investment into digital infrastructure or requires universal access to a certain quality of connection



Thanks!



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