INFORMATICS PROFESSIONALS. LEADING THE WAY.

April 16, 2018

Honorable Marsha Blackburn
Chairman
Energy & Commerce Committee
Subcommittee on Communications and Technology
2125 Rayburn House Office Building
Washington, D.C. 20515

Honorable Michael Doyle
Ranking Member
Energy & Commerce Committee
Subcommittee on Communications and Technology
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Blackburn and Ranking Member Doyle:

The American Medical Informatics Association (AMIA) applauds the House Energy & Commerce Committee's continued exploration into the challenges and opportunities presented by our ever-expanding Internet-based economy and application ecosystem. The topic of your hearing, "From Core to Edge: Perspective on Internet Prioritization," is a central consideration in the ongoing debate over the role of government in balancing support for consumer protections with support for innovation.

AMIA is the professional home for more than 5,500 informatics professionals, representing front-line clinicians, researchers, educators and public health experts who bring meaning to data, manage information and generate new knowledge across the health and health care enterprise. As the voice of the nation's biomedical and health informatics professionals, AMIA plays a leading role in advancing health and wellness by moving basic research findings from bench to bedside, and evaluating interventions, innovations and public policy across settings and patient populations.

As a membership-driven organization dedicated to the science of data collection, analysis, and application, AMIA strives to deliver evidence-based policy recommendations that focus on the opportunities and challenges of implementing health informatics tools, such as electronic health records (EHR), health information exchanges, clinical decision support, and other kinds of analytics tools to support health, care, and research.

AMIA posits that (1) access to high-speed broadband greatly determines the trajectory of individuals' health; (2) increasingly, care is delivered outside the four walls of our traditional healthcare system and more data are being exchanged across geographic and organizational boundaries to support such care; and (3) individuals are being empowered and incentivized to leverage consumer technologies to prevent and manage disease through Internet-connected devices. **Together, these factors presage a need to ensure a robust health broadband economy driven by public policy that encourages low-cost broadband options with open access and transparent terms of service.** This is especially needed for medically underserved Americans, who are more likely to reside in poor and rural areas of the country where existing broadband options are inferior.

Broadband as a Social Determinant of Health

While it is difficult to know definitively how paid prioritization might impact connectivity, latency, and speed at a systems level, the removal a basic consumer protection coupled with a loss of oversight authority makes for dubious circumstances. What we do know is that lack of access to broadband Internet services in the home or community negatively impacts individuals' health, and the problem is magnified for racial and ethnic minorities, persons of lower socioeconomic status, and other disadvantaged groups.[1,2,3] It is, therefore, possible to conclude that diminished access to broadband – and the applications that comprise the emerging broadband health ecosystem – will have similarly negative effects.

In our view, the role of public policy should be one that encourages low-cost broadband options through increased competition with open access (i.e. no additional cost to connect to specific kinds of applications and content) and transparent terms of service (i.e. clearly stated performance expectations). Arguably, paid prioritization runs counter to the goal of open access. While we acknowledge that there could be definable instances where prioritization could be useful, such as for telehealth services, we also question the need for paid prioritization given the existence of exemption options for non-Broadband Internet Access Services, also referred to as non-BIAS data services.[4]

As a practical matter, the oversight of a system that does not allow for paid prioritization, except for under clearly articulated and thoroughly considered conditions, would be easier to manage than a system that allows for such prioritization unless or until there is inappropriate behavior. The number and types of regulatory controls that would need to be in place to understand and substantiate claims of inappropriate behavior would negate any perceived gains in removing the prohibition on paid prioritization. **AMIA recommends a thoughtful examination of exemptions, rather than wholesale removal of the prohibition, as a reasonable and responsible next step.** Congress could review the number and nature of exemption applications, as well as consider the impact of the exemptions once granted. Fundamentally altering the existing "best efforts" basis upon which Internet traffic is delivered should not be a step taken lightly.

Distributed and Virtual Care Delivery

[1] Perzynski A., Roach, M.J., Shick, S. et al; Patient portals and broadband internet inequality. J Am Med Inform Assoc 2017 ocx020. doi: 10.1093/jamia/ocx020

[2] Graetz I, Gordon N, Fung V, et al. The Digital Divide and Patient Portals: Internet Access Explained Differences in Patient Portal Use for Secure Messaging by Age, Race, and Income. Med Care. 2016 Aug;54(8):772-9. doi: 10.1097/MLR.0000000000000560.

[3] Gibbons, M.C., Wilson, R.F., Samal, L. et al. Consumer health informatics: results of a systematic evidence review and evidence based recommendations. Behav. Med. Pract. Policy Res. (2011) 1: 72. doi:10.1007/s13142-011-0016-4

[4] FCC Order 15-24 states on pg. 58 "[W]e note that telemedicine services might alternatively be structured as 'non-BIAS data services,' which are beyond the reach of the open Internet rules.", *available at*: https://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0312/FCC-15-24A1.pdf.

American Medical Informatics Association | AMIA
4720 Montgomery Lane, Suite 500 | Bethesda, Maryland 20814

While speculative, there are numerous scenarios involving the use of Internet-reliant health informatics tools that could be impacted negatively by a tiered servicing scheme that results in fewer service options or increased costs. These tools are both institution-focused as well as – and increasingly – individual-focused.

Healthcare delivery has undergone a digital transformation in the last five years. More than 96 percent of U.S. hospitals[5] and 83 percent of U.S. office-based physicians[6] have adopted EHR systems. Some of these EHR systems are cloud-based, requiring fast, reliable Internet to access stored data. There is also a fledgling effort by the federal government to establish a network-of-networks for all EHRs to exchange health data, known as the Trusted Exchange Framework and Common Agreement, or TEFCA.[7] Under this policy, a physician in Oregon can access a vast network of patient records beyond her own EHR by connecting to a local hub. The government hopes that the same network can deliver bulk access to many patient records at one time for quality and cost assessments.[8]

Other Internet-reliant tools include telehealth and telemedicine, many of which utilize high-resolution images, video, and voice conferencing. Various healthcare organizations are experimenting with remote patient monitoring, fitness trackers, and mobile health applications that rely on Internet connections to better develop pictures of their patients' health, as well.[9]

While some institutions may have the resources to easily handle increased prices for prioritization, many others will not. And given that individuals increasingly rely on Internet-based consumer electronics to manage and prevent disease, the unknown variables of paid prioritization beg caution. Numerous hospitals that would benefit from telehealth and remote patient monitoring service rural areas, which are already at a disadvantage when it comes to Internet access.[10] Introducing paid prioritization may be helpful in delivering reliable broadband, but if such services are not affordable, the benefits are lost.

Patient Empowerment

Recent updates to Apple's iPhone and iPad give individuals the ability to view their health records.[11] While this may not seem a momentous feat, it could be the catalyst for a nascent ecosystem of

[5] Henry, J., Pylypchulk, Y., et al. Office of the National Coordinator for Health IT, "Adoption of Electronic Health Record Systems among U.S. Non-Federal Acute Care Hospitals: 2008-2015," Data Brief No. 35, May 2016
[6] Heisey-Grove, D., Vaishali, P. Office of the National Coordinator for Health IT, "Any, Certified, and Basic: Quantifying Physician EHR Adoption through 2014," ONC Data Brief, No. 28, Sept. 2015
[7] Office of the National Coordinator for Health IT. Trusted Exchange Framework and Common Agreement. https://www.healthit.gov/topic/interoperability/trusted-exchange-framework-and-common-agreement
[8] Ibid.
[9] See also "Redefining Our Picture of Health: Towards a Person-Centered Integrated Care, Research, Wellness, and Community Ecosystem:" A White Paper of the 2017 AMIA Policy Invitational. Available at: https://www.amia.org/sites/default/files/API-2017-White-Paper-Redefining-our-Picture-of-Health.pdf
[10] Connect2HealthFCC. Mapping Broadband Health in America 2017. Map available at: https://www.fcc.gov/reports-research/maps/connect2health/#ll=40,-95&z=4&t=broadband&bbm=fixed_access&dmf=none&zlt=county
[11] Farr, C. "Apple will let you keep your medical records on your iPhone," CNBC. January 24, 2018

American Medical Informatics Association | AMIA
4720 Montgomery Lane, Suite 500 | Bethesda, Maryland 20814

consumer-driven health-related mobile applications. Much like access to, and utilization of, high-quality health care and prevention strategies, mobile Health (mHealth) technologies that rely on broadband services have a wide adoption variance based on geography, population density, and socioeconomic status. Vulnerable groups face specific challenges related to inadequate access to affordable and consistent high-speed Internet. Race, ethnic, and age disparities in patient portal use and readiness and preferences for using digital communication for health-related purposes have shown to be significant,[12] and this, in turn, reduces their ability to participate in many new and exciting mHealth solutions. These groups would benefit from an environment that fosters low-cost broadband options with access that would be open and as ubiquitous as possible.

It is difficult to know how the current exemption system might treat this ecosystem, as patients and individuals are the impetus for such technologies, not hospitals and health systems. Nevertheless, should paid prioritization result in content- or producer-dependent pricing and performance variance, we would expect a widening of the digital divide and a worsening of health disparities.

Conclusions

Given that so much is unknown about the future impact of paid prioritization, AMIA strongly urges caution. Congress would do well to favor legislative options that can substantiate claims of benefit as well as claims of harm. Leveraging the existing pathway of non-BIAS exemption is the responsible way to test such claims. Such an approach allows for measured experimentation, while keeping important oversight mechanisms in place to mitigate growing health disparities among those that can afford to participate in our increasingly digital health system, and those who cannot.

We appreciate this opportunity to submit this statement for the record. Should you have any questions or require additional information, please contact AMIA Vice President for Public Policy Jeffery Smith at jsmith@amia.org or (301) 657-1291 ext. 113. We look forward to further dialogue on this issue.

Sincerely,

Jeffery R. L. Smith, M.P.P
Vice President of Public Policy
AMIA

[12] Gordon N.P., Hornbrook M.C. Differences in Access to and Preferences for Using Patient Portals and Other eHealth Technologies Based on Race, Ethnicity, and Age: A Database and Survey Study of Seniors in a Large Health Plan. J Med Internet Res. 2016 Mar 4;18(3):e50. doi: 10.2196/jmir.5105.

American Medical Informatics Association | AMIA
4720 Montgomery Lane, Suite 500 | Bethesda, Maryland 20814