

Net Neutrality Debate and Connected Health

Introduction

In recent months, a great deal has been said about net neutrality. The basic premise of “net neutrality” is that all traffic on the Internet should be treated the same. The Federal Communications Commission (FCC) regulates interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Columbia and U.S. territories. It is an independent U.S. government agency overseen by Congress and is the United States' primary authority for communications law, regulation and technological innovation. In this capacity, the FCC issued a notice of proposed rulemaking (NPRM) of draft regulations “to find the best approach to protecting and promoting Internet openness.”¹ While much of the explanation and discussion around net neutrality has focused on impacts on innovation, business and consumer rights, what has been lacking has been discussion on how regulations may impact health care, and specifically connected health, which includes telehealth, mobile health and health information exchange. The following is a high-level overview of the current net neutrality discussions and the potential impact to the connected health field. References made in this document will lead the reader to more information should they wish to explore specific points in more detail.

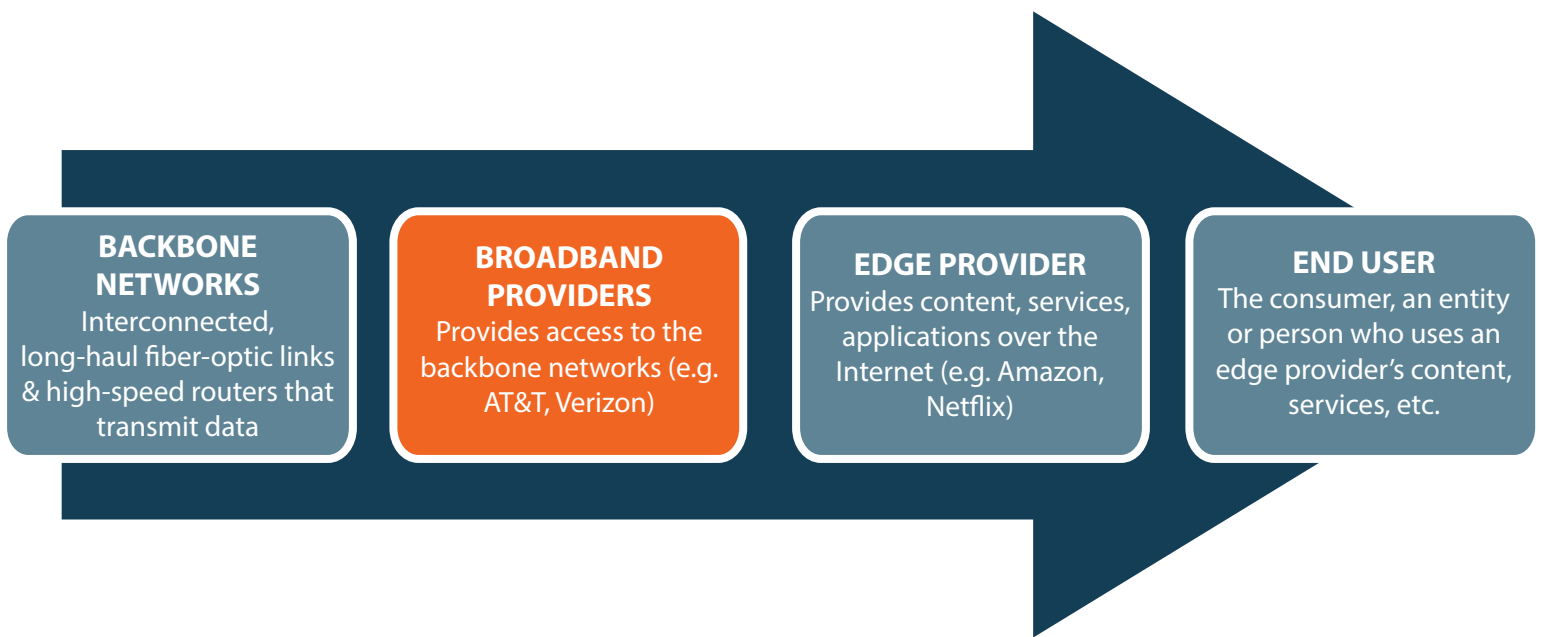
Background

The Key Players

The participants in the Internet marketplace can be divided up into four categories:

- Backbone networks
- Broadband providers
- Edge Providers
- End Users

The net neutrality debate is primarily concerned with regulating the broadband providers who provide Internet users a connection to the content the edge providers put out. The broadband providers operate the “last-mile” transmission lines that link end users to the Internet. (See Figure 1)



The Court Cases

Prior to the recent NPRM, the FCC made two attempts to issue rules around net neutrality (or as it has sometimes been referred to “the Open Internet”). In 2010, the District of Columbia Circuit Court ruled against the FCC’s first attempt in *Comcast Corp. v. FCC* (600 F.3d 642 (D.C. Cir. 2010)) stating that the Commission failed to cite any statutory authority that would justify its order to compel broadband providers to adhere to open network management practices.² In response, the FCC issued another order *In re Preserving the Open Internet* (25 F.C.C.R. 17905 (2010)) (Open Internet Order). Verizon challenged this order and the DC Circuit Court ruled on the case January 14, 2014.

In this second attempt, the DC Circuit Court ruled against the FCC once again. In short, it found that the FCC did not provide adequate legal reasoning to justify the regulations it proposed to impose on broadband providers. The FCC, in the *Open Internet Order*, relied on the justification of treating broadband providers as “telecommunication carriers”, carriers that provide basic services such as phone. If allowed, this would provide the Commission with wide authority over the providers based upon authority in Title II of the Telecommunications Act of 1996. However, in previous FCC action, broadband providers were classified as “information-service providers,” exempting them from the Title II oversight on which the FCC was basing their justification for this order. It is here that the DC Circuit Court found against the FCC,

We have little hesitation in concluding that the anti-discrimination obligation imposed on fixed broadband providers has “relegated [those providers], pro tanto, to common carrier status.”...In requiring broadband providers to serve all edge providers without “unreasonable discrimination,” this rule by its very terms compels those providers to hold themselves out “to serve the public indiscriminately.”³

However, the DC Circuit Court noted that the FCC was not without recourse. The FCC put forth an argument that Section 706(a) and (b) of the Telecommunications Act of 1996 provided the Commission with authority to regulate broadband providers regarding the issue of net neutrality. The DC Circuit Court agreed with this argument:

To be sure, as with section 706(a), it is unclear whether section 706(b), in providing that the Commission “shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market,” vested the Commission with authority to remove such barriers to infrastructure investment and competition... But the provision may certainly be read to accomplish as much, and given such ambiguity we have no basis for rejecting the Commission’s determination that it should be so understood.”⁴

While this court may have struck down the FCC’s *Open Internet Order* based upon lack of authority from Title II, it did provide the Commission with an alternative. This decision led to the May NPRM.

Notice of Proposed Rulemaking

The NPRM was released on May 15, 2014 with a comment start date of July 15, 2014, ending on September 10, 2014. The proposed regulations state that in providing fixed or mobile broadband, the broadband provider may not block lawful content. Additionally, a fixed broadband provider “shall not engage in commercially unreasonable practice.”⁵

The FCC states that the “no blocking rule” would “allow broadband providers sufficient flexibility to negotiate terms of service individually with edge providers, consistent with the court’s view that we must permit providers to ‘adapt...to individualized circumstances without having to hold themselves out to serve all comers indiscriminately on the same or standardized terms.’”⁶ In short, broadband providers may charge varying prices for various levels of connectivity. The FCC does state that a minimum level of access under the no blocking rule would be required.⁷ However, that indicates that what would be offered would be levels of connectivity beyond the minimum requirement. Therefore, depending on what is paid, different speeds of connection may exist for edge providers and end users.

The Impact on Connected Health

There was a noticeable absence of references related to health in the NPRM. In remarks by the FCC Chair and Commissioners, health was mentioned a total of two times by one commissioner in her remarks.⁸ Commissioner Clyburn alluded to telehealth by noting that “[h]ealthcare professionals worrying that the images they need to view will load too slowly and that patients will be unable to benefit from the latest technologies and specialized care made possible through remote monitoring.”⁹

Telehealth and other forms of connected health cannot exist without some high-speed communications connection. A tiered system where the speed of a broadband connection may vary would have an enormous impact on telehealth which relies on strong, fast reliable connections in order to transmit video and information. While larger institutions may be able to afford participating in a tiered system, telehealth is used frequently in small communities by rural hospitals and community health centers who likely will not have the resources to pay for a fast connection in a tiered system.

In the discussions around net neutrality, stifling of innovation and entrepreneurship has been frequently raised as a concern. Connected health innovators and entrepreneurs would be similarly impacted. Developers of health apps face the same issues raised in discussions around the impact on mobile applications. Digital communications in health care is a rapidly growing enterprise, with an estimated \$3 billion in investments in 2014, a 100% increase over 2013.¹⁰ Most of the start-up companies in this field are small businesses and would not be able to compete.

A bigger question for the field is whether net neutrality is the most appropriate answer for health care and connected health? All things being equal, a world of net neutrality would suggest that a telehealth/mobile health connection would face the same disruptions and slow down as everyone else. In health care, where uninterrupted, clear communication is vital in many cases, slow-downs and disruptions in access would be disastrous not only in individual cases, but also in public health episodes such as natural disasters or communications regarding diseases such as the recent Ebola concerns. For example, a stroke patient enters a rural hospital without a neurologist on site, but can immediately connect to one via telehealth. In certain cases, if a drug called tissue plasminogen activator (tPA) is administered within a small window of time, a stroke patient may recover fully. However, that determination of administering tPA needs to be made by a neurologist. If a connection is slow or is unable to be made because of a heavy traffic day, the tight window for administering the drug will be closed. It could mean the difference between life-long disability and complete recovery for patients.

Considerations

Clearly health care and more specifically connected health care, deserves special consideration in this debate. The proposed regulations potentially offer a slight window of opportunity:

Nothing in this part supersedes any obligation or authorization a provider of broadband Internet access service may have to address the needs of emergency communications or law enforcement, public safety, or national security authorities, consistent with or as permitted by applicable law, or limits the providers ability to do so.¹¹

While, health and telehealth are not explicitly mentioned in that proposed section, the argument can be made that an exception in the language currently proposed should be made for connected care in the interest of preserving “public safety”. However, considering the lack of any specific health care discussion in the nearly 99 pages of explanation, proposed regulations and commissioners’ comments, it remains unclear how this field will be viewed in the final determination.

Perhaps the best course of action would be to engage in a more thorough, explicit discussion of healthcare and connected health in this debate. While concerns regarding stifling innovation, compromising business development, and protecting the consumer are all important, there is no greater issue than insuring that health care systems can rely on access to high speed, uninterrupted digital communications to expand access, and improve the quality and efficiency of care, and this topic should receive the highest priority of attention in this debate.

¹ Federal Communications Commission, 14-61 Notice of Proposed rulemaking, May 15, 2014, Section 1, paragraph 4.

² Verizon v. Federal Communications Commission, D.C., Cir., No. 11-1355, (January 14, 2014).

³ Ibid., Section III(C).

⁴ Ibid., Section II(B).

⁵ Federal Communications Commission, Proposed regulations §8.7 No Commercially Unreasonable Practices.

⁶ Federal Communications Commission, Proposed regulations, Section III, paragraph 97.

⁷ Federal Communications Commission, Proposed regulations, Section III, paragraph 98.

⁸ Statement of Commissioner Mignon L. Clyburn, RE: Protecting and Promoting the Open Internet, GN Docket No. 14-28, May 15, 2014.

⁹ Ibid.

¹⁰ Rock Health, Q3 Funding Update: Digital Health Rakes in \$3B, < <http://rockhealth.com/2014/10/q3-funding-update-digital-health-rakes-3b/>> (Accessed Oct. 24, 2014).

¹¹ Federal Communications Commission, Proposed regulations §8.9 Other Laws and Considerations.

The Center for Connected Health Policy (CCHP) is a non-profit, nonpartisan organization that develops and advances telehealth policy solutions that promote improvements in health and health care systems. CCHP is the federally designated National Telehealth Policy Resource Center (NTRC-P), providing technical assistance to twelve Regional Resource Centers nationwide, and serves as a national resource on telehealth policy. The NTRC-P project is made possible by Grant #G22RH24746 from the Office of the Advancement of Telehealth, Health Resources and Services Administration, Department of Health and Human Services. CCHP was created in 2008 by the California HealthCare Foundation, who remains its lead funder. CCHP is a program of the Public Health Institute.