Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Promoting Telehealth in Rural America   )   **Docket No. 17-310**

Comments of

NTCA–THE RURAL BROADBAND ASSOCIATION

To the Commission:

I.   <u>INTRODUCTION</u>

NTCA–The Rural Broadband Association (NTCA) hereby submits comments in the

above-captioned proceeding. The Universal Service Fund (USF) embraces several important

programs. As the Commission considers updates to the Rural Health Care (RHC) program,

NTCA urges the Commission to ensure that any modifications to the RHC promote the

prospects and overall goals of universal service as reflected and carefully coordinated across the

four important programs beneath the broader USF umbrella. In these comments, NTCA

supports the Commission's overarching goal to facilitate greater provision of telehealth in rural

America. NTCA urges the Commission to pursue this goal, including funding and distribution

methodologies, on the bases of evidentiary data with a principal focus on defined needs and

desired outcomes. Accordingly, resources that are to be allocated to these purposes should be

based upon a realistic, data-driven expectation of fulfilling public policy, rather than an

arbitrarily drawn process that is not correlated to the task at hand.

II. DISCUSSION

A. TELEHEALTH CAN SERVE CRITICAL HEALTHCARE NEEDS IN RURAL AMERICA

The imperative to deploy telehealth was described in a Public Notice released by the Commission last year.[1] NTCA submits that the reasons established in the Public Notice are accentuated in rural areas, where telehealth promises beneficial results. Residents of rural areas experience greater incidences of chronic and other conditions as compared to their urban counterparts. When combined with distance from or lack of access to physicians and health care facilities and prevailing socioeconomic challenges, obstacles to the acquisition of affordable health care arise. Broadband-enabled applications can shatter these barriers and result in improved healthcare at lower costs, benefiting rural users while lowering National healthcare costs.

More than 20 percent of the U.S. population faces at least two chronic conditions. Rural areas contain about 20 percent of the U.S. population but are on average poorer and older; rural residents also have higher dependency rates than urban areas.[2] Rural poverty *increases* the risk of complications from chronic conditions and *decreases* the likelihood of health insurance that can enable consistent treatment and preventative care.[3] Increased incidences of medical

---

[1] "FCC Seeks Comment and Data on Actions to Accelerate Adoption and Accessibility of Broadband-Enabled Health Care Solutions and Advanced Technologies," Public Notice, GN Docket No. 16-46, FCC 17-46 (Apr. 24, 2017).

[2] *See, Rural Women's Health,* National Rural Health Association Policy Brief at 1 (NRHA) (internal citations omitted). *See, also, Rural Populations and Health: Determinants, Disparities and Solutions: Book Review,* Preventing Chronic Disease, Centers for Disease Control and Prevention, Vol. 10 (Jun. 27, 2013) (CDC).

[3] NRHA, *supra* n.24, at 1.

conditions in rural areas include: diabetes (17 percent higher),[4] hypertension,[5] obesity (in women, 23 percent vs. 16 percent in large metro areas),[6] cancer, edentulism (total tooth loss) among persons 65 and older,[7] and injury. Higher rates of high-risk behaviors including smoking, physical inactivity, poor diet and limited use of seatbelts are also present in rural areas.[8] Rural health challenges are compounded by physician shortages and lack of access to nearby health care facilities. And, while about 20 percent of the U.S. population resides in rural areas, only 10 percent of the Nation's physicians are in rural America.[9] Rural areas have 70 percent fewer specialists per 100,000 people, and residents tend to travel further for medical care than urban counterparts.[10]

Broadband-enabled telemedicine can address core rural healthcare needs. By way of example, diabetes is identified as the leading cause of blindness in the United States. Despite recommendations form the American Diabetes Association for annual eye exams, approximately only 60 percent of patients comply.[11] The potential for positive impacts of

---

[4] NRHA, *supra* n.24, at 2.

[5] "What's Different About Rural Health Care?" National Rural Health Association, at 1 (www.ruralhealthweb.org/go/left/about-ruralhealth) (NRHA II).

[6] NRHA, *supra* n.24, at 2.

[7] Rural Health Disparities, Rural Health Information Hub at 2 (ruralhealthinfo.org/topics/rural-health-disparities).

[8] CDC.

[9] NRHA II, *supra* n.27, at 2.

[10] NRHA, *supra* n.24, at 4.

[11] Zimbalist, Richard J., Scharnweber, Amber R., "Teleretinal Imaging for Diabetic Retinopathy," Review of Optometry (Dec. 15, 2016)

telehealth interventions can be illustrated by observing the results of studies that focused on

teleretinal imaging to diagnose diabetic retinopathy. An article notes,

> The economic burden of vision loss from diabetes is enormous and has been
> calculated at $132 billion in direct and indirect costs. These include medical
> costs, including hospitalizations and the costs of medications, vision
> rehabilitation, loss of productivity, and the impact on quality of life. The benefits
> of detecting and treating sight-threatening retinopathy in patients with diabetes
> have been borne out by many cost-effectiveness and cost-utility studies.[12]

The article explains that although initial studies failed to reveal an economic benefit, subsequent

studies demonstrated "important cost benefit[s]." However, another article cautions,

> Teleretinal imaging does not take the place of a comprehensive eye examination.
> There is a common misperception that the use telemedicine will result in fewer
> referrals for eye care services. The goal of TRI (teleretinal imaging) is to capture
> the 40% of diabetes sufferers who are noncompliant with annual retinal
> examinations.[13]

Capturing the non-compliant is especially important, as TRI screenings have intercepted *other*

conditions, including cataracts, age-related maculopathy, and glaucoma. And, patient

satisfaction was found to be "universally positive."[14] For these and other reasons as detailed in

NTCA's comments on the afore-mentioned Public Notice, the Commission's current inquiry to

properly budget and develop distribution methodologies for rural health care is welcome. This

opportunity should be taken to assess accurately the needs of rural areas; identify the resources

---

(https://www.reviewofoptometry.com/article/teleretinal-imaging-for-diabetic-retinopathy) (last
viewed May 23, 2017, 11:53) (internal citations omitted) (Zimbalist, Scharnweber).

[12] Cavallerano, Anthony A., Conlin, Paul R., "Teleretinal Imaging to Screen for Diabetic
Retinopathy in the Veterans Health Administration," Journal of Diabetes Science and
Technology (Jan. 2008) (internal citations omitted)
(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2769713) (last viewed Jan. 25, 2018, 17:52)
(Cavvallerano, Conlin)

[13] Zimbalist, Scharnweber (internal citations omitted).

[14] Cavallerano, Conlin (internal citations omitted).

necessary to meet those needs; and to set into comprehensive motion a holistic determination of how the various elements of the USF, particularly high-cost support, can be leveraged to support rural health care.

B. RURAL HEALTH CARE WILL BE SERVED MOST EFFICIENTLY BY LEVERAGING EXISTING ASSETS

The most efficient use of critical USF resources, including those within the RHC, can be realized by ensuring that any modifications do not result in the overbuilding of existing infrastructure or assets supported by other USF programs. Instead, RHC resources can go further – and further the mission of enabling technology-driven health care for a greater population – by making effective use of existing network assets and focusing use of program resources on the discrete, unique missions of enhancing rural health care technology and responding to increasing rural telehealth needs. Put another way, any modifications that yield more resources for the RHC must recognize how the various programs within the USF work most effectively in collaboration with each other. Accordingly, existing infrastructure that can support rural health care applications – especially, but not only, existing infrastructure supported by other USF programs –should be viewed as a critical partner in the task of developing solutions for rural areas. These include not only local rural broadband networks, but larger regional networks, as well. In 28 states, rural telecom providers own and operate regional fiber networks that can ensure the speed and capacities demanded by data-heavy telemedicine services.[15] By way of example, SDN Communications interconnects 24 independent telephone

---

[15] These states are: Arkansas; California; Colorado; Idaho; Illinois; Indiana; Iowa; Kansas; Michigan; Minnesota; Missouri; Montana; Nebraska; New York; Nevada; North Dakota; Ohio; Oklahoma; Oregon; South Carolina; South Dakota; Tennessee; Texas; Utah; Virginia; Washington; Wisconsin; Wyoming. *See,* http://www.indatel.com/content/maps-members-network. Indatel is a national association whose members are statewide network providers.

company networks from three states (South Dakota, Minnesota and Iowa). SDN serves several large, Northern Plains healthcare organizations, but it is the primary connectivity partner for Avera Health. Its eCARE division provides virtual hospital services through 330 connections in 14 states, supporting 13 percent of the Nation's critical access hospitals and more than one-million patients served. An estimated $188 million has been saved through its video "house calls." The system serves as virtual school nurses in 15 districts, including very rural schools where medical help can be an hour away. This type of effort has also been implemented by NTCA member ComSouth in Hawkinsville, Georgia, which partnered with the county public school system to deploy telehealth equipment in school nurses' offices. These are connected to physicians at Taylor Regional Center. Working with the Georgia Partnership for Telehealth, the hospital, school and ComSouth facilitate better health care for students who might not otherwise be able to be seen by a physician. These measures are especially beneficial in the ComSouth service area, where the median income is $15,000 below the National average and where a visit to the doctor could implicate not only the cost of the visit but also lost wages for parents who take their children to the doctor.

The core competencies of rural broadband providers like NTCA members can be leveraged to support solutions for the delivery of rural health care, supporting preventative health care, managing chronic conditions, and preventing costly patient readmissions.[16] Through

---

[16] In many locations, including Indiana, Iowa, Kansas, North Dakota and Wisconsin, fiber optic connectivity among local clinics and regional medical centers. For a detailed discussion of these initiatives, *see, Actions to Accelerate Adoption and Accessibility of Broadband-Enabled Health Care Solutions and Advanced Technologies: Comments of NTCA–The Rural Broadband Association,* Docket No. 16-46, at 17-20 (May 24, 2017).

NTCA's Smart Rural Community (SRC) initiative,[17] innovative broadband-enabled applications have been deployed to nursing homes and hospice facilities.[18] In Brandon, Minnesota, NTCA member Gardonville Cooperative Telephone Association partnered with a hospice to deploy small-form MiFi routers to enable patient connectivity to the Internet, enabling vital signs monitoring and social connectivity. In Jefferson, North Carolina, where 30 percent of the population is 60 and older, Skyline Membership Cooperative deployed broadband-enabled patient monitoring solutions at an assisted living facility. And, in 2017, the NTCA SRC initiative developed the nation's first Virtual Living Room/VALOR[SM] deployment. Collaboration among NTCA, People's Rural Telephone Cooperative, Jackson County Public Library, Jackson Energy, and the Lexington Veterans Administration Medical Center, created a public facility at which U.S. service veterans can obtain free access to Veterans Administration telehealth and other on-line services.[19] NTCA recognizes that just as there is no single "rural America," there is also no uniform rural health condition or solution; localities present unique circumstances that may be addressed through the RHC. However, NTCA submits that the VALOR program and other examples of NTCA member efforts evidence the fact that existing, underlying rural broadband networks will play a critical supporting role for rural health care.

---

[17] Smart Rural Community comprises programming relating to and promoting rural broadband networks and their broadband-enabled applications that communities can leverage to foster innovative economic development, education, health care, government services, public safety and other vital public functions. *See,* www.ntca.org/smart.

[19] *See,* "Local Library Offers Private Space for Rural Veterans Tele-mental Health Services," The Rural Connection, U.S. Veterans Administration Office of Rural Health, p.2 (Winter 2018) (available at https://www.ruralhealth.va.gov/docs/news/ORH_Newsletter_Winter2017_FINAL.pdf#page=2) (last viewed Feb. 1, 2018, 10:54).

NTCA submits that creative and collaborative solutions that look toward existing rural broadband infrastructure can lead the way for efficient and effective health care in rural areas, and enable RHC program funds to go further in fulfilling the discrete mission of expanding the reach of health care access and telehealth capabilities. Accordingly, NTCA commends the Commission to consider how the incorporation and strengthening of existing network infrastructure assets can drive efficient advancement of RHC goals.

III.   CONCLUSION

As described herein and above, NTCA supports the Commission's overarching goal to facilitate greater provision of telehealth in rural America. NTCA submits that evidentiary data with a principal focus on defined needs and desired outcomes will drive the most effective outcomes. NTCA further urges the Commission to ensure that usefulness of existing networks is considered, and to avoid overbuilding of existing infrastructure or assets supported by other USF programs.

Respectfully submitted,

By: /s/ Joshua Seidemann
Joshua Seidemann
Vice President of Policy
NTCA–The Rural Broadband Association
4121 Wilson Boulevard, Suite 1000
jseidemann@ntca.org
703/351-2000

February 2, 2018