New England Telehealth Consortium

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VIA ELECTRONIC FILING

Re: Comments in WC Docket No. 17-310
Promoting Telehealth in Rural America

On behalf of the New England Telehealth Consortium (NETC), we appreciate the opportunity to submit these comments in response to the Notice of Proposed Rulemaking (NPRM) for the FCC's Rural Health Care (RHC) program. NETC is one of the largest and oldest consortium networks in the RHC program, having started in 2008 under the RHC Pilot Program and now exclusively utilizing the Healthcare Connect Fund (HCF). Using a $24.6 million initial Pilot Program award, we were able to design, implement, and now operate a growing, dedicated health care network across New England. We started with 320 sites in Maine, New Hampshire, and Vermont, and have grown to 890 sites extending into Massachusetts, Rhode Island, and Connecticut. With the help of the initial Pilot Program investment (at an 85% subsidy level), we designed a highly efficient network with redundant network cores (which we own) and lease competitively priced last-mile and middle-mile broadband connectivity from multiple providers. In addition to managed and monitored private network services, we feature access to the internet. As we expand, we are becoming a network-of-networks, using the NETC ring and redundant cores to connect health care networks and systems across our region – meeting the FCC's goal for facilitating the digital interconnection of regional health care sites.[1]

Our experience successfully deploying and operating NETC reflects our understanding of health information technology (Health IT) and a deep appreciation for the needs and challenges faced by the hundreds of health care providers we serve. We also have much experience with USAC and the RHC application process. Because of our size, we have developed templates and automated systems that help us overcome the challenges of navigating a large consortium through the RHC funding processes. We bring this unique experience to bear in our comments below.

General NPRM Comments

Funding from the FCC's Rural Health Care program has fostered critical improvements in access to telehealth and telemedicine for the mostly rural HCPs we serve across New England.

[1] *See Rural Health Care Support Mechanism*, WC Docket No. 02-60, Order, 21 FCC Rcd 11111, ¶ 10 (2006) (*2006 Pilot Program Order*) ("Consistent with the mandate provided in section 254(h)(2)(A) and general principles of universal service . . . [the] comprehensive network [funded through the Pilot Program] will provide the health care communities access to the various technologies and medical expertise that reside in specific hospitals, medical schools, and health centers within a region or state.").

Notwithstanding the one-time RHC investments that helped launch NETC, Health IT continues to evolve, bringing transformation that is driving exponential increases in bandwidth demand among our many participants. In addition, our rural communities face economic hardship, difficult demographic trends, and public health challenges such as the opioid crisis. As a result, we see ongoing, predictable, and sufficient RHC funding as vital to rural health care and necessary for fulfilling Congress's intention to "enhance . . . access to advanced telecommunications and information services for all public and nonprofit . . . health care providers."[2]

Following are examples of how NETC is facilitating or provisioning affordable broadband connectivity for rural health care providers in New England:

- Seven coastal Maine Islands have affordable broadband access that allows island residents to receive mainland medical care via telemedicine.
- NETC is working with the medical center on Block Island Rhode Island to get broadband access sufficient to support a cloud-based Electronic Health Records (EHRs) solution.
- Eastern Maine Healthcare System provides critical telehealth applications to two thirds of the rural hospitals and clinics in Maine and supports both EHRs and Picture Archiving and Communication System (PACS) imaging.[3]
- Acadia Hospital provides Tele-psychiatry to 32 rural health care providers throughout Maine including: Emergency Department Tele-Psychiatry, Behavioral Health Integration Tele-Psychiatry, and Tele-Psychiatry Inpatient Consultations.
- Rural clinics, hospitals and mental health sites use NETC RHC-subsidized circuits to effectively practice medicine and treat patients. NETC participants use our circuits to:
    - Meet digital demands on healthcare
    - Implement telehealth applications
    - Capture and transmit PACS imaging
    - Implement and maintain EHRs
    - Address the Rural doctor deficit/shortage

[2] *See* 47 U.S.C. § 254(h)(2)(A).

[3] PACS are used for care that is dependent on the imagery associated with CT scans, MRIs, X-rays, and echocardiograms.

- Enable rural sites to access clinical urban specialties
- Transition to cloud-based applications

More generally, RHC subsidies allow New England rural hospitals to buy the broadband necessary to support the healthcare industry's digital transition, including accessing health services that are increasingly being provided from urban hospitals.

Specific NPRM Comments

Consortia are Efficient and Benefit Rural HCPs in Numerous Ways

As NETC has itself demonstrated, consortia applicants with a significant proportion of non-rural participants deliver significant and important benefits to rural HCPs. NETC itself is 85% rural, with over 750 rural HCPs participating. NETC was designed as the most efficient way to deliver broadband for health care across New England and that design has itself lowered service costs by reducing the distances last mile connections need to travel to reach the network. This purposeful design, in addition to bulk buying, has facilitated low bandwidth costs for our participants. Aggregating administrative functions also brings greater efficiency as each participant can rely on NETC to provide network expertise and resources to handle the USAC application process. Small rural HCPs, and rural critical access hospitals (CAHs) in particular, do not have the time or resources to design, implement, and subsidize cost effective networks.

Delivering these benefits and efficiencies is costly, and NETC like other consortia incur significant financial burdens to deliver these efficiencies. Having eligible non-rural HCPs such as urban hub hospitals as financially contributing participants is critical to helping offset these administrative burdens. In addition, rural HCPs primarily get their telehealth applications from urban hospital systems, further strengthening the importance of urban HCPs being on the network so that rural sites can connect to them.

De-Prioritizing Consortia or Non-Rural HCPs Will Harm Rural HCPs

Because of these benefits – which include significant costs savings to the USF through lower bandwidth costs – NETC opposes any type of priority system in the RHC program that would or could limit the growth of consortia, or that would further limit the number of eligible urban participants in consortia. For example, we urge the Commission not to establish a system where urban HCPs that participate in consortia could end up with little or no RHC subsidy.

Urban HCP participants in consortia benefit rural HCPs in several ways. Because urban HCPs have more resources to implement expensive telehealth applications that rural HCPs require, it is the urban HCPs that are also driving the need for increased WAN and Internet bandwidth to their rural counterparts. Without the HCF subsidy for cloud-based multi-point WANs such as NETC, urban HCPs often simply pass their greater connectivity costs on to the rural HCPs that are purchasing telehealth services. Rural HCPs that cannot afford these services are increasingly merging with urban HCPs or simply closing their doors. Keeping the urban HCPs in relationship with the rural HCPs through consortia like NETC provides an incentive for urban HCPs to support the network and makes their telemedicine programs more affordable and accessible for their rural counterparts.

We oppose generally any type of priority system that would exempt one class of HCPs from pro-rata reductions – such as individual applicants, rural HCPs, or Telecom Program participants – leaving the unprioritized classes of HCPs to bear the brunt of *pro rata* reductions. This would exacerbate the unpredictability of the current system for unprioritized participants.

The Commission suggested in the *NPRM and Order* that bulk buying discounts available to consortia made them better able to bear the cost of *pro rata* funding reductions.[4] However, buying power varies by contract and NETC's use of the HCF to interconnect small adjoining networks of just a few HCPs, does not generally result in volume discounts. Thus, the Commission's premise that "consortia" are all benefiting from unusually low pricing as compared to individual applicants is only occasionally true.

A system that prioritizes individual applicants over consortia will undermine the efficiencies offered by consortia and thus increase wasteful program spending. NETC continues to evolve into the regional network-of-networks the FCC envisioned – and invested millions in – back in 2006 when it launched the Pilot Program. The NETC core provides a 120Gb backbone network that was designed and purchased with the generous 85% available in the Pilot Program. As part of the Pilot Program, NETC secured long-term, cost-effective master service agreements with eight different vendors who built out and provisioned the core NETC network. With those investments in place, NETC is utilizing the HCF to support adjoining networks and interconnect them to the NETC core network. The Commission has not provided a reasonable or sufficient

[4] *See NPRM and Order* at ¶ 109 ("Individual rural healthcare providers generally do not have the advantages of bargaining power or the economies of scale in purchasing services that consortia have and so likely would be at risk of greater harm from the proration.").

explanation for why consortia like NETC that are successfully delivering these benefits should be de-prioritized.

Equipment

Network equipment at the edge and core of NETC is important for NETC to continue to grow and support its base of participants. When HCPs transition to modern broadband, new edge equipment at their location is frequently needed. That equipment supports greater bandwidth typically delivered through new networking technologies such as Ethernet and MPLS. HCF funding for equipment is integral to the success of consortia like NETC and so we oppose any effort to de-prioritize equipment in the HCF. Moreover, there is no data available indicating how much of the HCF is being used for equipment and so it is far from clear that reducing or eliminating equipment would achieve a lessening of the impact of *pro rata* reductions on other services.

The Commission Should Increase the Cap to Ensure Sufficient Funding for the RHC Program

As NETC works to realize the FCC's network-of-networks vision for health care, we believe it is important to recognize that the RHC program was created by Congress to do exactly what NETC is doing. The Commission should conclude, for example, that growing demand for this funding is an opportunity to fulfill a clear Congressional objective, not a problem to be fixed.

From NETC's vantage, growth in demand for bandwidth among our participants is primary evidence of the transformation of rural health care through telehealth that Congress and this Commission have long envisioned. The growth in bandwidth demand in our user base is driven by many factors including:

- The increased use of telehealth applications; (NETC participants are using 50 of the 51 categories of telehealth applications that are tracked by USAC for purposes of the consortium annual reports);

- The movement of applications into the cloud, including offsite data centers, and access to urban hospital data centers via private networks.

Our bandwidth growth has been staggering. To wit:

- NETC site bandwidth demand, 2010 thru 2017
    - 33% year-over-year growth

  - 320 original NETC sites:
    - Bandwidth provisioned in 2010: 6 Gbps
    - Bandwidth provisioned in 2017: 45 Gbps
- NETC Projected Site Bandwidth Demand, 2017 thru 2024
  - Projected 33% year-over-year growth
  - 890 current NETC sites
    - Bandwidth provisioned in 2017: 232 Gbps
    - Projected Bandwidth demand in 2024: 1700 Gbps

NETC data shows that bandwidth costs are decreasing by as much as 15% per year, but as noted, our bandwidth requirements are increasing by 33% per year. Thus, growth in demand is consistently outpacing decreased cost.

Other Recommendations

NETC supports separating the Telecom Program from the HCF, while indexing the existing cap to inflation and reserving it solely for the HCF.

Having non-rural HCPs participate in a mostly rural consortium offers significant benefits to rural HCPs. Therefore, NETC recommends keeping the 65% HCF subsidy for all eligible participants, including urban and rural.

USAC Needs to be More Responsive

As a very large consortium, NETC is disproportionally affected when USAC faces delays in processing RHC funding applications, appeals, or just answering programmatic questions. Improving the performance of USAC is one way to minimize the impact of potentially burdensome new requirements the Commission may impose on the program. To address this issue, we recommend USAC retain more staff to administer the RHC program and that greater oversight be provided with respect to how quickly USAC processes applications and appeals, and responses to guidance requests.

We also support imposing processing deadlines that would require USAC to issue funding decisions, or at least some type of provisional funding award notice, within 90 days of receiving an application. This type of turnaround is critical for large consortia that are facing constant "churn" as their many participants drop or add connectivity, and close, move, or increase

bandwidth. Returning to a rolling decision process would be extremely helpful and we support SHLB's suggestion that application decisions can and should be made public before the annual *pro rata* factor is known. Indeed, prior to the cap it was not uncommon for USAC to process FCLs in 30 to 60 days. We think it is critical to formulate a way to return as much as possible to that level of responsiveness.

We also think USAC should be developing more automated interfaces to receive bulk information uploads from consortia. NETC would be happy to meet with USAC to discuss how this might be done.

Cost effectiveness

Lastly, NETC does not believe it is necessary to make significant changes to the cost effectiveness standard in the HCF. First, HCF applicants face such a significant match requirement at 35% that they have much "skin-in-the-game." This provides a significant incentive not to over-purchase bandwidth and to seek the lowest cost provider wherever reasonably possible. Indeed, recent RHC program enforcement activity appears to solely involve the Telecom Program. Moreover, implementing any system where USAC is incentivized to micromanage the types and levels of services obtained by an HCP is asking for even greater delay and difficulty in an already lengthy process. HCPs will always be in the best position to know their own network requirements.

On behalf of NETC and its participants, thank you for this opportunity to provide comments that we hope will be helpful to the Commission.

Sincerely,

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