

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of )  
 )  
Promoting Telehealth for Low-Income Consumers ) WC Docket No. 18-213  
 )

COMMENTS OF MICROSOFT CORPORATION

Microsoft commends the Federal Communications Commission (“Commission”) for proposing an innovative approach to improve the telehealth options for veterans and rural and low-income communities.<sup>1</sup> Broadband service is as important as electricity or phone service to the welfare of Americans, and it increasingly plays an essential role in affording effective health care. The Commission, which is statutorily charged with the responsibility for ensuring that broadband service is available and affordable for all Americans, has a unique opportunity – and, indeed, a duty -- to sponsor innovative, targeted pilots such as the Connected Care Pilot Program (“Pilot”).

There are 2.7 million veterans enrolled in Veterans Affairs (VA) who are living in rural communities, and 42 percent of them do not have internet access at home which could support their use of VA telehealth services, according to the U.S. Department of Veterans Affairs’, Veterans Health Administration’s Office of Rural Health. Broadband connectivity will enable these veterans to access telehealth services offered by the VA.

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<sup>1</sup> See *Promoting Telehealth for Low-Income Consumers*, WC Docket No. 18-213, Notice of Proposed Rulemaking, FCC 19-64 (rel. July 11, 2019) (“Notice”).

Addressing the broadband gap across the country requires innovative solutions from both the public and private sectors. On the private side, Microsoft recently announced its commitment to helping to solve the broadband availability gap for America's veterans in rural areas. In coordination with the U.S. Department of Veterans Affairs, Microsoft and its partners will leverage their capital, technology expertise, and training resources to bring broadband access to people in underserved communities. Through our VA partnership, we at Microsoft will develop and employ data analytics to help the VA to identify communities with veterans in need and work with our internet service provider (ISP) partners across the nation to bring broadband services to those regions. Following our Airband Initiative model, Microsoft also will provide the veterans in these newly connected communities with digital skills training so they can take advantage of the tools and services connectivity enables, including critical telehealth services provided by the VA.

Microsoft's Airband ISP partners are currently deploying broadband to improve access to telehealth applications in high-need communities. Microsoft's Airband partner Declaration Networks Group is extending broadband access to underserved rural areas in Maryland, Virginia and Washington States and enabling telehealth applications to improve the quality of life for people that previously lacked access to vital services.<sup>2</sup> Astrea, formerly known as Packerland Broadband, also is providing vital broadband access on Tribal lands in Wisconsin, as well as

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<sup>2</sup> See "Declaration Networks Group and Microsoft Announce Agreement to Deliver Broadband Internet to Rural Communities in Virginia and Maryland," *available at*: <https://news.microsoft.com/2018/04/24/declaration-networks-group-and-microsoft-announce-agreement-to-deliver-broadband-internet-to-rural-communities-in-virginia-and-maryland/>, (Apr. 24, 2018); See also Connect America Now, Garrett County video, *available at*: <https://youtu.be/nM2yre0CkM4>.

working to extend broadband infrastructure that will enable regional Veterans hospitals in Wisconsin and Michigan to bring telemedicine opportunities to veterans that are not able to easily avail themselves of critical health care services.<sup>3</sup> Sacred Wind Communications is yet another Microsoft Airband partner extending broadband access in high-need communities, including customers residing on Tribal lands in New Mexico.

There is scholarship indicating that patients living in rural areas are in need of broadband service to enable home health care. Recently, Washington State University Extension's Broadband Action Team completed surveys in Ferry and Stevens Counties in the State of Washington.<sup>4</sup> These studies surveyed the broadband experience of residents in these areas and determined that these rural communities have a higher than average percentage of veterans. Due to the issues that many veterans face such as disabilities, post-traumatic stress disorder, depression, or suicide, the lack of broadband in rural communities can be detrimental to the health of veteran communities. Further, rural communities have been particularly affected by substance abuse and the opioid crisis. Implementation of telemedicine programs enables the use of telehealth to coordinate care for substance abuse and addiction treatment.

Our partners that serve Tribal lands also recognize the need for these essential services due to the health concerns of the Tribal communities – including the high incidence of diabetes,

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<sup>3</sup> See "Packerland Broadband and Microsoft Announce Agreement to Deliver Broadband Internet to Rural Communities in Wisconsin and Michigan," *available at*: <https://news.microsoft.com/2018/02/25/packerland-broadband-and-microsoft-announce-agreement-to-deliver-broadband-internet-to-rural-communities-in-wisconsin-and-michigan/>, (Feb. 28, 2018).

<sup>4</sup> See Washington State University Extension's Broadband Action Team, *available at*: <https://extension.wsu.edu/stevens/broadband-action-team/>.

heart disease and alcoholism, as well as the related conditions associated with these diseases. Remote patient monitoring is especially impactful for persons with these diseases while living in communities that are remote from health care facilities. For example, our partner, Sacred Wind, serves one area that has five home care service companies, all Navajo-owned, that operate in its service area. They require a broadband connection at the customer's premise in order to qualify for insurance reimbursement. Because there are only two medical clinics in their service territory, the opportunity to significantly improve health care services to Sacred Wind's tribal customers lies in its ability to increase service to the home more so than to the clinic that already has broadband connectivity. This example offers an additional demonstration of how high-speed broadband availability will increase economic and health care opportunities.

There is good reason to believe that the Commission's proposed investment in the Connected Care pilot will reduce health care costs for patients and the health care system. More importantly, however, this pilot is likely to improve health care outcomes for participants. Microsoft's own experience supports this expectation. Several years ago, together with Health Choice Network, TracFone Wireless, and MobiMedix, Microsoft was privileged to participate in a mobile health pilot program in the Miami-Dade County area designed to tackle chronic medical care challenges and ascertain how access to broadband mobile technology could improve patient compliance, education, and ultimately disease-related outcomes. Each patient received a smartphone with prepaid mobile broadband services and a custom application to provide patients with security-enhanced and HIPAA-compliant access to their personal health record, treatment plans, aid in disease self-tracking for blood sugar levels, and other vital health information that, together, helped them improve their engagement and manage their disease.

Patients enrolled in the program showed significant reductions in their Hemoglobin A1c (a diabetes measure), quantifying improvements in management of patients' diabetes.

The support for health care institutions is laudable and important, but it is not sufficient to improve telehealth opportunities. To fully accomplish the objectives here, the Commission also must address the other side of the broadband connection – connectivity of telehealth recipients. The Notice recognizes that the lack of home broadband service is a primary obstacle for adoption and use of telehealth technologies and acknowledges that “patient broadband internet access service is therefore an important factor that drives health care providers’ decisions on whether to invest in connected care options for patients.”<sup>5</sup> Thus, connecting individuals and households in targeted communities with broadband service will serve the core objectives of the telehealth program.

An efficient and effective approach for connecting the communities targeted by the Connected Care Pilot will use a mixture of different technologies, including fixed wireless. To that end, the Commission’s program should support network equipment such as fixed wireless network connectivity devices and antenna through which households could obtain fixed wireless broadband service. Further, to maximize the effective use of federal dollars, the Commission should allow participating healthcare institutions to leverage their Pilot-enabled broadband connections for healthcare-related uses by patients in their homes *e.g.*, through the use of fixed wireless extension of a healthcare facility’s wired network to patients’ homes within range. This connectivity to patients’ homes would facilitate remote access to healthcare and also would be

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<sup>5</sup> Notice at ¶ 13.

likely to facilitate the collection of health care telemetry (and, in telemetry collection use cases, speeds of less than 25/3 Mbps down/up may still prove to be useful).

Finally, to maximize the effective use of limited funds and avoid waste, the Commission must rely on good data to deploy the Pilot's resources where the need is greatest. That data should derive from sufficiently precise broadband mapping sources, preferably avoiding exclusive reliance on sources such as Form 477 data, which does not provide an accurate picture of actual broadband usage,<sup>6</sup> and should instead be open to using alternative data sources including the Commission's own subscription data and Microsoft's usage data.<sup>7</sup> Optimally, targeted health care institutions should be located within a hospital service territory that encompasses (1) a high percentage of households exhibiting low broadband usage; and (2) Tribal lands and/or a population with a reasonably sizable representation of veterans and persons with low incomes.

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<sup>6</sup> See Letter to Marlene H. Dortch, Secretary, FCC from Paula Boyd, Microsoft Corporation and David LaFuria, Lukas, LaFluria, Gutierrez & Sachs, LLP, WC Docket Nos. 11-10 and 19-195 (July 25, 2019) (describing likelihood that continued reliance on Form 477 data, as then collected, would result in an overstatement of broadband availability); *see also* Letter to Marlene H. Dortch, Secretary, FCC from Paula Boyd, Microsoft Corporation and David LaFuria, Lukas, LaFluria, Gutierrez & Sachs, LLP, WC Docket No. 11-10 (Dec. 5, 2018) (describing flaws in Form 477 data).

<sup>7</sup> The Commission should offer Pilot applicants the opportunity to rebut any presumption that the Form 477 data is definitive of actual broadband availability within a given geographic area.

Microsoft is committed to improving broadband connectivity in rural and Tribal areas and among veteran and low-income populations. Accordingly, it supports the proposed Connected Care Pilot Program and looks forward to the improvements in patient welfare and health outcomes, as well as the reduction in health care costs, that it is likely to produce.

Respectfully submitted,

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