

Federal Communications Commission
Before the
Federal Communications Commission
Washington, D.C. 20554

FCC 18-112

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

RESPONSE TO NOTICE OF INQUIRY

Reply Comment Date: October 10, 2018

I am Charlie Nahabedian, CEO of VideoKall, Inc. and have reviewed the above referenced Notice of Inquiry whereby the FCC Seeks Comments on Launching a Telehealth Pilot Program.

VideoKall has a unique and patented robust telemedicine platform for telehealth services for rural, suburban and urban areas. Here is a 3-minute video on the concept: <https://youtu.be/yMI09GviK00>

VideoKall is a telemedicine platform provider and operator specializing in enabling medical providers (e.g. hospitals, insurance companies and clinics) to provide healthcare services to patients in convenient locations wherever they live, work, travel, go to school or shop. The platform provides value to medical providers by facilitating the opportunity for lower capital and operating costs for serving low-acuity patients. At the same time, the providers can enjoy a profitable revenue stream from the services offered over the platform. These savings can be shared with their patients by offering lower prices.

The patients are served by on-site micro-clinics providing convenient access for primary healthcare, like services currently provided in mini-clinics for frequent seasonal illnesses, and the monitoring of chronic illnesses. A full array of clinically accepted FDA cleared/approved devices are available for patient use. Patients benefit from on-demand, guided, self-service triage and treatment services, and are connected with broadband circuits by broadband fiber and/or satellite connections. With our technical, patient and medical performance parameters, there is no dedicated labor costs by VideoKall or the micro-clinic host at the point of service and the medical provider can utilize Nurse Practitioners. VideoKall's telemedicine platform has proprietary hardware and software technology to operate over satellite and includes one patent issued and two patents pending.

Our integrated platform is comprised of a fully-equipped booth and call center hub which have been in development for 2+ years, while the software, cleaning system and stethoscope seatback are already being tested. The production platform will be tested in 6-8 months with a hospital and senior living facility.

With the proper support, we can place our patient booths anywhere in rural areas, connect by satellite, and have patients triaged, assessed, and in some cases treated, including the issue of a prescription, without traveling hours to a doctor. The retail price for a visit, without reimbursement, is projected to be in the \$55-\$65 range, compared to mini-clinics charging \$90 minimum for similar services. The projected cost to the patient after reimbursement would be between \$0 to \$30, based upon full subsidy to no subsidy, respectively. If patients are ambulatory, even in a wheel-chair, they can visit our booths and receive services from their local or regional medical provider. This leaves only the homebound patients needing service who could be served by dedicated equipment in the home, connected by a variety of telecom technologies.

There is much more to this story, and I am willing explain the benefits of this unique platform which can equalize access to healthcare for rural patients.

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short overview video: <https://youtu.be/yMI09GviK00>

[The remainder of the page is deliberately blank with comments on the following pages in response to some of the Commission's questions]

Comments from VideoKall, Inc., Creators of CLINICSTOP

as they relate to the comments in the Notice of Inquiry.

What we will offer:

The services provided by the medical entity over our platform provides the same High-quality health care a patient would otherwise receive in the physical presence of a Nurse Practitioner. With the proper and full-array of vital signs devices, artificial intelligence packages, and supplementary services in certain environs, cutting-edge connected care services can be provided to respond to a wide breadth of health challenges, such as:

- diabetes management
- heart disease
- opioid dependency
- stroke management
- mental health treatment
- high-risk pregnancy advising
- seasonal illnesses

These services can also be enabled by existing broadband technologies or next-generation technologies, such as 5G. Many low-income Americans, particularly those living in rural areas, would be able to benefit from these advanced telehealth services at a local supermarket, drug store, senior living facility, or school, to name a few locations.

VideoKall's software-enabled platform which includes mobile apps, web access, local touch-screen check in, and interface to EHRs and Health Exchanges, should be part of an experimental "Connected Care Pilot Program" to support the delivery of these telehealth services to low-income Americans, with a focus on the delivery of such services to patients beyond the doors of brick-and-mortar health care facilities.

The "hub-and-spoke" model of our platform exists from the patient location to the satellite teleport prior to switching/routing to the proper medical serving location, whether it is the medical entity of record for that patient location, or the Veterans Administration, in the case of a veteran. We utilize interconnected monitoring devices, broadband-enabled video-conferencing, and network computing, so that patients and providers can realize the benefits of these technologies that keep patients seamlessly connected to health care *beyond* brick and mortar facilities.

To provide convenient access near work, home, school, travel or shopping, and rural areas, the micro clinics need to be deployed in supermarkets, corporate buildings, universities, large senior living facilities, high schools, truck stops, and rural community centers. That number totals approximately 6 million locations providing a potential capturable market of less than 1%. If this 1% captured market translated into 32,000 locations, with 10 visits per day [close to reported traffic for mini-clinics] for up to 365 days per year, there would be a total of 117 million visits per year. Further, if the service cost of using the micro-clinic for the patient and insurance company, together, is approximately \$60 per visit, compared to \$90 for a mini-clinic or \$155 for an urgent care center, the difference of \$60 on average, would amount to a savings of over \$7 billion. Likely, the 32,000 units would take around 10 years to build out, but over those 10 years, the US healthcare costs could be reduced by around \$35 billion.

Discussion on Comments in the Notice of Inquiry

VideoKall believes that universal service support can play a vital role in improving access to cutting-edge digital health resources and bridging the health care divide for low-income patients in

particular. Rural and economically-deprived communities could apply for subsidies for the purchase and installation of a micro-clinic (~\$75,000 each --- less than the loaded annual salary of a nurse practitioner for a single shift). The elimination of capital recovery for the medical provider could reduce the \$50-\$60 retail price for service to \$30-\$40 per visit --- close to the projected reimbursement from Medicare for the offered services.

With our system, health care providers selected to participate in a pilot program would NOT need to receive funding to construct a dedicated broadband network to the patient area. This is because the satellite network exists and VideoKall has a technique to utilize that service very economically. The trial participants would be able to, ideally, apply for reimbursement for the micro-clinics as noted above, or subsidies for the satellite network services with operational support.

Improving Health Outcomes Through Broadband Access.

Broadband is essential to utilizing lower cost Nurse Practitioners instead of doctors for the multitude of low-acuity (non-critical) medical conditions. Without the performance of stable, high performance broadband, the Nurse Practitioner would likely not fully receive the responses needed for high confidence of patient reporting. With power and cable to a (mobile or stationary) satellite antenna, the micro-clinic can be indoors, in a mobile unit, or an outdoor unit or in a purpose-built concrete shelter and can serve low income populations of all sizes without the need for a medical person physically present with the patient.

Our broadband solution will improve health outcomes generally. By placing these low-cost micro-clinics in locations of convenience as noted above, patients will be within minutes travel from an access point and can more easily fit a healthcare visit into their daily routine. With also a low co-pay, patients would check themselves out earlier and the population would generally be in better health, and chronically ill patients would also enjoy better longevity. There are medical journal articles on these benefits for use of telehealth for chronic conditions. Also, significantly, with shorter travel to points of access, the consumption of gasoline will be greatly reduced, and patients and/or their companions would have more productive time for work, home or local activities.

Supporting the Trend Towards Connected Care Everywhere. VideoKall is part of the movement in telehealth which is beyond connectivity within and between physical health care centers, and towards connected care everywhere model. The services from a Nurse Practitioner in a call center with a supervising physician is direct-to-consumer health care that is patient-centered and ensures that low-income Americans can realize the benefits of this trend and newer technologies. The costs and benefits of our solution facilitates ubiquitous connected care without dedicating a full array of clinically-acceptable vital signs devices in each home.

Reducing Health Care Costs for Patients, Facilities, and the Health Care System. VideoKall's solution reduces the rising health care costs faced by consumers and health care facilities. With or without subsidies for qualified communities, we can counteract the burdens of increasing out-of-pocket expenses, including transportation costs for rural and remote patients. A pilot program with our solution reduces health care expenditures for participating health care providers and their qualifying patients. Our solution stratifies health symptoms and illness so that the lower acuity patients are served in our units, and the moderate acuity patients are served by physicians in offices and urgent care centers, and the acute care patients are served by emergency departments.

In our units, there are no attendants at the point of service, and the unit has systems to clean and sanitize the micro-clinic and vital signs devices before the next patient. Because of the array of devices, patient-provided information, and broadband performance, nurse practitioners rather than doctors can triage, assess, and treat patients, and provide prescriptions, except for pain killers. More serious cases would be referred out to doctors, labs, urgent care centers and emergency departments.

The lower cost structure will support low-income patients in creating savings for insurance companies, Medicare and Medicaid, and in turn, lessen burdens for premium payers and taxpayers. Medicare generally leads the way on reimbursements for telehealth. CMS should be encouraged to broaden their reimbursement for telehealth based upon services provided for all geographies. Only then can telehealth be universally beneficial.

So, we will provide communal broadband as needed rather than dedicated broadband to each home. We also have shared use of full array of medical vital signs devices.

Telehealth at home with medical instruments as needed could then utilize dedicated per home solutions which may or may not use broadband to the home. Also, broadband capacity to the home may not be utilized as much for healthcare than for entertainment; one has to wonder if the entertainment would be an impediment or incentive for more telehealth to the home. Our solution is more telehealth concentric, rather than offering broadband to the home.

Reimbursements can be established from quantitative data from trials. After that, market competition can be encouraged to incentivize payors in the healthcare system to more fully support the long-term deployment and use of these telehealth technologies. The VideoKall platform is a broadband system with open-architecture on the patient side, and on the medical provider side. Over time, new technologies can be added and interfaced to benefit the patient and healthcare providers.

Determining How Universal Service Funding Can Positively Impact Existing Telehealth Initiatives.

We believe that the Commission should structure the program to require testing new and novel concepts like VideoKall's CLINICSTOP platform which is focused on telehealth delivery and applications.

Increasing Broadband Deployment in Unserved and Underserved Areas and Among Low-Income Households. VideoKall has developed a solution which does not require terrestrial broadband fiber in Unserved and Underserved Areas. ***In those areas, we utilize broadband satellite solutions.*** We do not believe that the FCC should be subsidizing uneconomical broadband solutions. The amount of funds needed and time to deploy such facilities will unduly delay economical broadband solutions and improved healthcare access that can be delivered today via integrated platforms utilizing broadband satellite. Therefore, by providing access within one or more locations in a rural community, the need for broadband into each low-income household is greatly reduced.

Structure of the Program

We believe that at least half the health care providers that serve primarily low-income populations should be partnering with a satellite-based solution such as VideoKall's platform. That way the Commission can compare efficacy data and economics in order to establish a comprehensive going forward program.

Budget

We believe that a trial with our platform can be more easily budgeted based upon an easily scaled infrastructure that is a function of the number of micro-clinics deployed. The program should specify the number of sites for micro-clinics and/or the population coverage per site.

Application Process and Types of Pilot Projects to Be Supported

We agree that an eligible health care provider would need to submit information such as: (1) a description of its proposed pilot project, including how the project will enable care to be delivered directly to patients beyond the walls of physical health care centers; (2) a description of the base technologies and architectures to ensure

economic delivery of services, (3) a description of the low-income population that would benefit from the project; (4) a description of how the healthcare provider will evaluate the results of its proposed pilot project (e.g. efficacy data for improved health outcomes, cost savings, etc.); (4) the name of the broadband platform and service provider(s) with which they would partner; (5) the supported services that partner would provide and the projected prices to patients and costs of services with and without subsidies.

A pilot project based on our VideoKall platform would be equipped with the location of CLINICSTOP micro-clinics which can be located nearby population centers and targeted on low-income Americans. These proposed projects should serve populations such as veterans, residents of Tribal lands, pregnant women, the elderly, or disabled Americans all within any one or multiplicity of micro-clinics.

Priority should be given to projects that do not require fiber build-out and yet provide broadband services for the end objectives of the program. The new technologies to bring these objectives may be a fully integrated end-to-end platform, such as the VideoKall platform. Therefore, the ideal solution is the total end-end platform, including patient units, telecommunications and medical provider equipment. To the extent that patients have micro-clinics nearby AND have home or personally based devices, the FCC should encourage the secure connectivity of these solutions. The FCC trials could subsidize any or all of these components.

We believe that the FCC establish a match-making process to introduce potential participants with enabling technologies to be trialed with health care providers that predominantly serve low-income patients, such as clinics, community hospitals, or hospitals serving patients eligible for Medicaid or veterans receiving cost-free medical care based on income. We believe that technology-based companies with complimentary technologies are in the best position to provide medical providers with an economical and properly performing integrated set of services to meet ALL of the FCC's original goals.

We believe the FCC should provide geographic diversity by including clinics in both urban and rural locations. Some inner-city areas, homeless shelters, and schools are underserved and/or overly costly. The pilot program should include at least one partnership involving clinics or hospitals located on Tribal lands.

Partnering with Facilities-Based Eligible Telecommunications Carriers

We believe that eligible healthcare providers need to contract with a partnering broadband service provider and end-end platform provider before submitting their applications for funding.

Eligible Low-Income Subscribers

FCC should not limit participation to only qualifying low-income Americans. With our solution, limiting use will work against communities and individuals because lower volumes would constrain financial viability. Higher volumes of users can be accommodated more easily with multiple patient units.

Broadband Service.

We believe the pilot program should provide funding for: (1) broadband connectivity of all types that eligible low-income patients of participating clinics and hospitals would use to receive connected care services in homes, community locations and schools; and (2) broadband connectivity that the participating clinic or hospital needs to conduct its proposed connected care pilot project. The modalities of broadband service that the pilot program should support include fixed, satellite and mobile broadband service to each participating hospital and clinic, working in partnership with facilities based and telehealth solutions providers.

The Commission states that "In the pilot program, we expect participating ETCs to work with the participating clinics or hospitals to ensure the supported broadband is sufficient for the healthcare uses for which it is

intended. Many traditional broadband-enabled telehealth services require high bandwidths and low latency, but this may not be the case for newer, connected care services.”

We believe that the Commission should adopt minimum service standards for the pilot program. If they use satellite, they should have a maximum latency for good interexchange conversation. If they use terrestrial telecom facilities, there should be technical performance standards for treatment sessions, and perhaps a relaxed standard for advice conversations. The Commission should consider service and device needs for synchronous applications (such as live video-conferencing to the patient) based upon the type of services by the healthcare provider. The pilot program should require specific service reliability commitments, to prevent patients of the participating clinics and hospitals from losing access to necessary healthcare services during the pilot program. Parameters such as % availability, and Mean Time Between Failures, % delay, % dropouts should be specified depending upon the medical services being provided.

Equipment.

We believe that the pilot program should support unique software and equipment necessary for the effective use of the broadband service, and to the extent such support is permitted under the Section 254 authority. We do not believe that standalone, common, off-the-shelf routers and servers at the clinic or hospital to assist with the additional telehealth needs must be financially supported. We suggest that the Healthcare Connect Fund (HCF) provide support for unique network equipment and/or software necessary to make a broadband service functional in conjunction with providing support for the healthcare services and for consortium applicants; the HCF also should provide support for equipment necessary to manage, control, or maintain a broadband service or a dedicated healthcare broadband network. In our platform that would include an operations center to monitor and manage the entire deployment across the country.

The Commission asked, “Should the Connected Care Pilot Program provide similar support?”

We believe that the pilot program should support for end-user devices that can be shared amongst patients, if the devices are sanitized between users. This would include equipment used to provide connected care services, such as the electronics, micro-clinic support-subsystems and software. That would include tablets or smartphones that could be used for the telehealth applications.

The Commission states that, “The Lifeline program, which is targeted toward low-income consumers, does not support consumer equipment or devices. Similarly, the HCF does not provide funding for equipment that is not directly associated with making broadband services functional (such as computers, end-user wireless devices, smartphones, tablets, and video/audio/web conferencing equipment or services). Should we allow funding of end-user equipment or devices during this pilot program, and if so, what would be the statutory authority?”

We believe that the Commission should consider first its primary objective which is:

1. Convenient healthcare to the targeted populations, and secondarily
2. Targeted subsidies to accomplish same

Our solution could include any or all of the portions of the system from a mobile app, check-in terminal outside the micro-clinic, the micro-clinic itself with devices and supporting systems within, the telecommunications equipment and services, and the clinics’ equipment including routers, servers and nurse practitioner terminals. Where some of this is NOT be consistent with your statutory authority under section 254, we recommend that the Commission request changes to section 254, and/or determine what other subsidies are available under other Federal programs, that could be simultaneously coupled with the applications.

Applications. We believe that the pilot program fund health applications be selected by the

participating healthcare providers for use by their participating patients. These could include mobile apps, artificial intelligence-based apps, and call center-based apps to fulfill the healthcare providers' health objectives.

Number of Pilot Projects Selected, Support Amount, and Disbursement

As long as some of our suggested requirements are incorporated, we believe that each participating partnership apply for a set amount of funding through the pilot program. Assuming a total program budget of \$100 million, we believe that 20-40 projects be accepted. In our platform, we believe a 20 micro-clinic trial would allow us to adequately demonstrate the optimum use of USF funding to promote connected care services to low-income households and low-income veterans. We would see the funding as partly an upfront amount plus a set monthly amount per household served to better incent the development of robust connected care pilot projects. In our case, a single micro-clinic supporting 4 patients per hour for 14 out of a possible 24 hours, would handle 56 patients per day.

If patients in a population need to make on average 2 visits per year, a single micro-clinic would have 20,000 visits per year and could serve a population of about 10,000. That would mean that the PRORATED cost per pop for our patient equipment would be approximately \$7.50. On the other hand, in another solution, if the telehealth costs per broadband household were \$500, then the total cost of the telehealth equipment for the population of 10,000 would be \$5 million compared to a booth in a convenient location for \$75,000. We believe the funding cap on selected projects should be in the \$3 million to \$5 million. We believe that a 10-15 location project using our micro-clinics would have a total project cost somewhere in that range.

In our platform deployment, the most efficient method for distributing pilot program funding would be for the installation, set-up, testing, operations and support of the platform covering the costs of the patients' micro-clinics, telecommunications carriers' fees, operations center, and the medical call center. Existing USF programs could be used as models only to the extent it applies to initial cost coverage or prorated patient cost per visit. Funds could be disbursed directly to the participating health care providers, unless a joint proposal is submitted where the participants' costs are identified by time, function, and amount.

Duration

We believe the duration of the pilot program should be a minimum of one year and a maximum of two-year of funding to obtain meaningful data and promote long term adoption of broadband-enabled telehealth services. We believe that this is long enough to observe metrics to evaluate the pilot program's performance. We believe that the Commission could consider a longer funding period, if the case is made that the longer period helps in the economic viability of the approach, but not to the detriment of other projects, in terms of the number of projects or the size of the projects.

Compliance with Federal, State, and Local Laws

The Commission should require self-declaration as to how any one project is meeting all the federal, state and city requirements including FDA and licensing. Some of those requirements may require substantiating documentation, unless there are allowances for trials and experimentation. On the other hand, the Commission should be aggressive and supportive to request changes in such regulations if it would improve telehealth implementation and delivery, especially with respect to multiple licensing of Nurse Practitioners and physicians, as well as State pre-requisites.

Ensuring the Effective, Fiscally Responsible Use of Pilot Program Funds

We believe the Commission should ensure that pilot program funding is only used for its intended purposes by requesting budgets for each project and requesting clinics and hospitals and/or ETCs be required to report certain data to their disbursements per the budget. The authority to impose such reporting obligations on

participating health care providers should be on the “prime recipient of the funds” that in turn would require the same from its vendors and partners. Audits and reports should be required at the midpoint or end of the pilot program to ensure the pilot program funds are only being used for their intended purposes, and appropriate and agreed upon results are submitted for the Commission’s evaluation. The Commission should require each project to either ensure that only eligible low-income patients OR low economically challenged communities OR rural communities receive the pilot program’s primary benefits.

Protecting Patient Information

The Commission should obtain efficacy data on health outcomes which, at an aggregate outcome level, safeguards patient information and complies with medical information privacy laws. Such submissions should meet the Health Insurance Portability and Accountability Act of 1996 (HIPAA) requirements on the use and disclosure of “protected health information” by covered entities. Health care providers and their vendors and suppliers should provide declarative statements as to how they meet HIPAA requirements.

Measuring Effectiveness of the Program

Measuring Enhancement to Existing Telehealth Initiatives

The Commission should require efficacy data on all projects under this program. This would include statistical data on customer conditions, resolution, and satisfaction, as well as medical center perspectives on symptoms and illnesses triaged, analyzed and treated, and those conditions that needed more extensive medical tests and/or treatment. Reported data should also include financial and usage data for comparative and evaluation purposes.

Measuring Broadband Deployment.

The pilot programs effect in promoting deployment of broadband in unserved and underserved areas should be evaluated. This is more challenging in expansion of terrestrial broadband and is more easily demonstrated in broadband satellite which we will primarily utilize.

Conclusion:

While we understand and appreciate that the Commission wishes to close the broadband gap between moderate-income and low-income families, we do not see that healthcare alone provides that justification, especially when there are more cost-effective community solutions as we have described above. If the true objectives of the program are to extend telehealth to rural communities, broadband to the home is the more expensive approach.