

**Remarks of FCC Commissioner Mignon L. Clyburn
2016 California Telehealth Network Annual Summit
San Diego, California
April 18, 2016**

Good morning. Allow me to thank the California Telehealth Network, for so graciously inviting me to take part in this year's summit. I must salute Sunne Wright McPeak, not only for that warm introduction, but for her continued leadership in closing the digital divide and advancing the deployment of broadband across the state of California.

"Disruptive innovation." Let us pause for a moment to consider what that really means. Coined by Harvard Business School Professor Clayton Christensen, the term has been used to describe advancements that are typically "cheaper, simpler, smaller, and, frequently, more convenient to use."

In today's conversation, broadband is one of those great disruptors. It fuels rapidly changing industries and enables those new ones that are being born. This is partly why I am so passionate when it comes to the topic of broadband-enabled health solutions because technology is such a game changer. It can dramatically improve patient outcomes, create efficiencies and improve our bottom lines by reducing health care costs. By one account, the U.S. could lower its health care costs by \$197 billion over the next 25 years through the use of remote monitoring to track the vital signs of patients with chronic diseases.

However, while broadband is completely changing when, how, and where medical care takes place, a persistent digital divide too often means that millions lack access to these advanced offerings which in turn means that all of us will be denied those benefits.

But I can say without hesitation, that the FCC, is doing its part to seize on the opportunities presented by these new technologies and address the barriers that stand in the way of advanced, accessible health care for all, regardless of race, geography, or socioeconomic background.

In the past, I have spoken about the Commission's three-pronged approach when it comes to addressing these issues: universal access, spectrum allocation, and collaboration. Today, I would like to share what I trust are novel thoughts, on how we can strengthen and expand our efforts to meet the needs, of both consumers and health care stakeholders today and for the future. Ultimately, this all starts with ubiquitous access to broadband, without which none of this would be possible.

When I discuss our efforts towards achieving universal access, at the heart of this mission is a singular focus summed up in this mantra: community, community, community. In communities all across this nation, be they urban or suburban, rural or Tribal, there exists a communications divide: A divide when it comes to broadband access, affordability and infrastructure; and a divide when it comes to the speeds necessary, to take advantage of all the Internet has to offer. The Commission's policies seek to connect communities and promote

universal opportunities for all, and in the context of access to health care services, broadband has the power to break down the barriers that have divided our communities for far too long.

By closing those gaps and increasing connectivity, we are working towards our goal of interconnected health that links people to the information and the resources they need, when they need them, to get well and stay healthy. As many of you know, the FCC launched the Connect2Health (C2H) Task Force to explore this intersection of broadband, advanced technologies, and health. But broadband-enabled health care is not just about the devices, services or the apps; it is about the individual, the consumer, the patient. It's about how technology can meet the needs and improve the lives of people in all communities. It is about how universal access to health care – access to the same care and well-being as your neighbor – strengthens the bonds within our local communities. I saw this first hand during a visit earlier this month to the UMMC Center for Telehealth in Jackson, Mississippi – a shining example of how bringing broadband connectivity to an underserved area can make a real difference in terms of improving health outcomes and lowering costs.

But universal access is also critical to connecting our first responders with hospitals and other medical facilities. Take for example the \$7 billion allocated by Congress in 2012 to establish FirstNet, a nationwide interoperable public safety broadband network that fulfills one of the last remaining recommendations of the 9/11 Commission. One of the many stated benefits of FirstNet is that first responders, such as EMS personnel in a rural part of the country, could actually communicate vital patient information, or advanced diagnostics. They could even stream live video from the scene to doctors, before the ambulance arrives at the hospital. By FirstNet's own account, "the broadband connectivity provided by [this network] will bring the 'hospital to the ambulance' like never before possible." For individuals, particularly those living in rural and tribal areas, many miles from the nearest hospital, this has the potential to be life-saving, ensuring the hospital is ready to accept the patient and treat them as soon as they arrive at the emergency room door.

While the synergies between FirstNet and the FCC's efforts to support broadband-enabled health care may seem obvious, none of this is possible unless our nation's health care facilities are equipped with the broadband connectivity needed to receive this critical patient information from first responders in the field. One such way to do so is by asking that applicants to the FCC's Healthcare Connect Fund, consider how they would make maximum use of FirstNet's enhanced connectivity as part of their funding application. Planning for FirstNet today, before the network has launched, will ensure the best use of limited funding and promote an interconnected health care ecosystem that is fueled by the power of broadband.

When I talk about connected communities, and the importance of universal opportunities for all, I am also speaking about the Commission's role in freeing up additional spectrum to promote and facilitate universal access to health care. Four years ago, the FCC adopted rules that enabled the U.S. to become the first in the world to allocate spectrum bands for new medical services such as Medical Body Area Networks or MBANs. These networks provide a "last meter" wireless link to eliminate the wires and cables that used to tether a patient to the monitor. This gives patients more freedom of movement which could result in more rapid recovery and discharge. It can also provide for earlier recognition of a patient's distress or decline, permitting

more timely intervention. This all should greatly improve patient care and reduce overall healthcare costs.

An FCC experimental license, has actually enabled the development of Medical micro power networks that are currently being used to activate and monitor nerves and muscles and restore sensation, mobility and other vital functions to the limbs and organs of stroke victims. The devices and innovations that spring from such mobile health networks are far reaching, and have the ability to impact the daily lives, of individuals everywhere. These are also the types of groundbreaking developments that provide 21st century solutions, for the modern health care industry.

Wearable devices and personal health technologies, are also a compelling example, of growing mobile health innovation. By one estimate, 39.5 million Americans used some type of wearable device last year, and this number is expected to double, by 2018. These devices demonstrate the power of spectrum to unlock opportunities for consumers to take control of their personal health.

From the most basic devices that monitor daily steps and vitals, to more complex technologies like glucose reading and heart monitoring, these innovations in the mobile ecosystem, have the potential to significantly impact the health and safety of individuals. For those living in rural America, the vital information sharing and personal health awareness that these devices facilitate, can improve basic wellness and make health care more accessible to those miles away from the nearest doctor or emergency room.

Central to our work in broadband-enabled health, is the Commission's efforts to improve collaboration among the relevant federal agencies, industry, and other stakeholders. This includes public-private partnerships, as well as public-public partnerships, such as the one I described earlier, between the FCC and FirstNet, and the collaboration between the FDA, the FCC, HHS, and other federal agencies, to promote innovation, protect patient safety, and avoid regulatory duplication.

The California Telehealth Network, is a shining example of what the FCC's Rural Health Care Pilot Program and now the Healthcare Connect Fund aim to achieve. CTN has used this money, to make massive strides and advance the ball in telehealth. By recognizing the effects of the digital divide on individuals in rural, tribal areas, and other medically underserved communities, you have encouraged health care providers to achieve higher standards of care, significant efficiencies, and meet federal mandates on electronic health records, by using telehealth applications.

Now serving over 750 health care provider locations throughout California, CTN is an example of how collaboration between the FCC and health care stakeholders, can expand access to health care in rural and underserved communities. The collaboration among state and federal agencies and industry associations; pooling the support mechanisms from the FCC and California Public Utilities Commission ... all of this encourages members to experiment with new health applications and innovative technologies by subsidizing telecommunications and Internet access costs and providing much needed financial support.

Building on the modernization efforts that have occurred to-date, what additional steps can the Commission take, to maximize the benefits and opportunities of the agency's Healthcare Connect Fund? I am here today, to engage and benefit from your expertise, on what questions the Commission should be asking, to ensure the program meets its full potential.

While the FCC updated the rural healthcare program and adopted the Healthcare Connect Fund in 2012, I believe the FCC should always look for ways to modernize our programs and reduce administrative burdens on participants. I understand CTN, has supported a petition from SHLB. I would like to hear more, on how we could refine the Healthcare Connect Fund, to ensure that it is better suited to meet today's and tomorrow's needs. Is the program aligned to the ways that health care is currently delivered in rural areas, and the ways it will be delivered in the future? Are the populations and counties most in need, able to participate robustly? And in terms of refinements, where could we get the biggest bang for the buck?

Speaking of telemedicine, in 2014, the FCC proposed to allocate \$50 million to conduct experiments that would explore how to improve access to advanced telecommunications and information services for healthcare, for vulnerable populations such as the elderly and veterans in rural, high-cost, and insular areas. The Commission recognized that telemedicine programs are critical to achieving cost savings in healthcare, and reducing the amount of time patients are away from home, but a critical gap remains, in ensuring that all patients have access to broadband connectivity at home to transmit the necessary data. The FCC did not receive sufficient proposals to move forward, but that proceeding remains open and I call on you to participate if you have yet to do so.

Through today's conversation and the continued cooperation, between federal and state agencies, broadband providers, technology companies and other industry stakeholders, can help stimulate investment in innovation and facilitate the advancement of community-focused solutions, to modern health care issues.

So again I return to my refrain: community, community, community. None of the steps towards the goal of connected communities would be possible, without affordable and ubiquitous, high-speed universal broadband. I think your President and CEO, actually said it best: "Broadband plays a very important role in health care reform, because it transcends the challenges of distance in the delivery of quality healthcare." The FCC takes very seriously, its role to advance the deployment and adoption of broadband, in a manner that is effective and mindful of the changing demands of today's health care industry.

And with this in mind, this March, FCC Chairman Wheeler circulated among his fellow Commissioners, a Public Notice that will solicit comment, data, and information, on a variety of regulatory, policy, and infrastructure issues, concerning broadband-enabled healthcare technologies and solutions. The notice does not propose any rule or policy changes. It does, however, ask for recommendations.

Its purpose is to enable the C2H Task Force and the FCC, to gain a broader understanding of the current state of broadband health connectivity (including connectivity gaps and needs), as well as to learn about the future uses of broadband-enabled health technologies

and wireless medical devices, and any regulatory issues or challenges that may emerge. When the notice is released, I would strongly encourage you to participate, submit comments, and meet with our Connect2Health FCC team so they can better understand the situation on the ground, and the future as you see it. As leaders in telehealth, your insights are invaluable.

The Connect2Health^{FCC} Task Force is also working to better understand local broadband health care ecosystems and what gaps and challenges remain. In the next month or so, The Task Force plans to launch a nationwide mapping tool that takes a unique approach to overlaying and integrating broadband and health data, down to the county level. For example, the map will help us to better understand where infrastructure gaps, poor health outcomes, and limited health care access coincide. At the end of the day, we all have to prioritize and it is critical to identify the areas, where public/private partnerships can get the biggest bang for the buck.

Thank you once again for allowing me to participate this year, and I look forward to hearing more ideas, about how the Commission can use the power of broadband, to modernize health care, for the 21st century.