Remarks of
Commissioner Mignon L. Clyburn
at the
FCC-Mayo Clinic Broadband Health Summit
"Building Connected Health and Smart Care Systems in Florida and Beyond"
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(as prepared for delivery)

Once again let me thank each of you for joining us today as we spend some time thinking about what a broadband-enabled health future could look like. We want to thank everyone at the Mayo Clinic for all of their fine work and especially Dr. TerKonda and Dr. Ommen from the Mayo Center for Connected Care. I also want to thank my good friend Chairman Wheeler and all the staff of the Connect2Health^{FCC} Task Force who worked to make this possible.

Earlier, Chairman Wheeler spoke about the impact of infrastructure networks and the potential of broadband networks to enable integrated, collaborative and comprehensive "smart" health systems. As important as these future systems could be, the Chairman and I do not believe them to be the goal. Said another way, it is not about the systems, but rather, how these systems empower consumers.

Today, if consumers develop a pain in the middle of the night, they can either go to an Emergency Room, if they live near one and can get there, or they may have to suffer until the morning when the doctor's office is open and they can call or go see the doctor. If a caregiver is uncertain how to change a surgical wound dressing, or is unsure if an incision is getting infected, the options for determining what to do are limited. Finally, when an elderly person lives alone, it is too easy for them to become socially isolated, malnourished or even depressed before they get needed assistance. The current health care system can at times work miracles to treat them when they develop these problems, but often is unable to do much to prevent these problems from happening in the first place.

These are not just theoretical exercises. Our population is aging. And many prefer to age in place and live independently as long as possible. Meaning we want to stay in our homes and be functional, mobile and with a good quality of life. But as we age our medical needs also increase. By 2030, 1 in 5 people are expected to be age 65 or older. And about 1 in 5 people over the age of 65 have 4 or more comorbid conditions. This means that both the breadth and depth of medical demands increase with an aging population. And we won't have enough healthcare workers to meet this demand. By 2025, we will have 50 to 100,000 fewer physicians than we need.

Broadband can serve as a bridge between this expanding chasm of diminishing resources and increasing need. Not only can it serve to connect needs to resources, but by interconnecting systems, broadband can be a force-multiplier to achieve positive health outcomes.

To accomplish this, we must build on broadband networks as the Chairman has talked about, to integrate not just medical systems with each other, but medical institutions, with social service providers, grocery stores, family caregivers, senior centers, fit bits, smart homes and cars. Then, the information and services these people and institutions provide, could be available to consumers anytime day or night, when they need them. It may just move the needle from what we have today, which are largely fragmented medical care systems, to establish integrated health networks, which enable essential health activities or functions.

First, because these systems could enable consumers to access the specific information, supports and services they need, these future "smart" systems could be exquisitely personalized to the specific needs of any consumer. Second, the data from the multiple sensors and monitors deployed in the homes and environment of the consumer, could be continuously analyzed and patients, caregivers or providers could be automatically alerted to potentially hazardous circumstances or issues before they cause health problems.

Take for example, a teenager who suffers from asthma. Scientists tell us that certain environmental triggers like pollen, pollution, cold air or certain foods can trigger asthma attacks. A "smart" health system could, in the future detect the levels of pollution in the air and automatically send an alert to the teenager's cell phone, while at the same time closing the windows in the house or car to limit exposure and help to lower the chance that an actual asthma attack may occur. Unlike the medical systems of today which will treat you if you can get to the ER, future "smart" health systems could actually be both preventive and proactive, helping consumers before a problem occurs.

Over time, these systems could assess broader consumer behavioral patterns (driving, shopping, diet, medication adherence etc.) and ultimately predict when a certain behavior will lead to poor health outcomes and help to prevent that outcome by suggesting or assisting with alternate behaviors.

Perhaps the most amazing thing about these future broadband-enabled "smart" health systems is that they could largely be passive. They will work to help consumers without the need for the consumer to do anything different or special. We know from public health that the most powerful health interventions are those that are passive. Take for example the fluoridation of water or iodination of salt. No one ever thinks about these things anymore. No one actually does anything to prevent the diseases caused by lack of iodine or fluoride, yet countless health problems have been prevented, lives saved and millions of dollars have and continue to be saved because of one substance that has been added to table salt and drinking water.

Finally, these smart systems would be dynamic in the sense that they would change over time as the needs of the consumer change.

In other words, we believe that there is significant potential for broadband-based smart health systems to enable providers to deliver better care to every consumer. It will also enable consumers to be much better equipped to manage their own care or the care of a loved one, at anytime, anywhere they are.

We call this "smart care."

Bottom line – “smart” health systems enabled by robust wired and wireless broadband networks could significantly improve consumer health management and caregiving experiences and usher in an era of “smart care” which today is simply not possible.

For the remainder of the program today, we will be focused on exploring with you what broadband-enabled “smart care” might look like right here in Florida. We have an interesting, interactive and hopefully thought-provoking afternoon planned, and we encourage you to actively join with us as we explore the possibilities together.

Thank You.