

From the desk of Rouzbeh



Dr. Rouzbeh Yassini

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Hello,

Delivering healthcare digitally to rural areas relies on broadband. Our concern at BCoE is that our society must somehow make telemedicine and broadband ubiquitous and available at lower costs. To be clear, the four primary areas of focus currently recognized in telemedicine are (1) virtual health visits for primary care and specialty care, (2) remote patient monitoring, (3) store-and-forward messaging between providers and patients, and (4) mobile health. A good resource for current information in these areas is the [CENTER FOR CONNECTED HEALTH POLICY](#).

As patient needs increase and medical capabilities become more sophisticated and interactive, secure broadband connectivity requirements between remote locations continues to grow. This is true not only for office/home environments, but also for your autonomous car where your sensor-based seat and your smart phone will soon play critical roles in data collection and for preventive and post medical issue healthcare

Obviously not all issues responsible for the slower than expected rollout of telemedicine are related to broadband coverage since there are many policy issues including privacy, insurance reimbursement, government regulations and lack of understanding that must be overcome.

However things are moving forward nationally. For example, a change in New Hampshire law now allows patients to have [REMOTE HEALTH CONSULTATIONS](#) with their doctor. Unfortunately [LAWS GOVERNING TELEMEDICINE](#) still vary from state to state with even New Hampshire instituting some restrictive policies.

And more than [HALF](#) the states require reimbursement for telemedicine and a majority of states have legislation regarding telemedicine, with [HAWAII](#) being among the latest. It is becoming clear that telemedicine can help to quantitatively improve preventive care and thereby reduce healthcare costs.

For additional reading on telemedicine, a very good exploratory paper is [“TELEMEDICINE: WHEN TO EMBARK ON AN ALTERNATIVE DELIVERY MODEL?”](#)

Global Broadband Speeds

Now, as to broadband, in case you are curious about where in the world Internet speeds really rock, the World Economic Forum has issued a [REPORT](#) showing the top 10 countries when it comes to fast broadband. South Korea again tops the list with an average of 26.3 Mbps. The US ranked 12th with average speed of 16.3 Mbps. The average speed globally is 6.3 Mbps.

This reporting is based on [FINDINGS](#) accrued by Akamai in Q3 2016, based on data it gleans from its globally distributed “Intelligent Platform” product. Akamai offers these quarterly reports — this one is 68 pages — on the State of the Internet. And you may have seen prior reports from Akamai and others on our [SITE](#).



Broadband Human Rights

The World Economic Forum also recently issued a separate report that I found interesting. Entitled “Going Digital: Should our human rights apply online as well,” the **ARTICLE** says that broadband is being seen as an inalienable human right driving healthcare and education, key elements of our 21st century economy.

And, further, it states that access is not enough: We’re all simultaneously expecting our data to be hacked at any moment and feeling powerless to prevent it. And, the Forum piece cites the Electronic Frontier Foundation’s recent **CALL** to technology companies to unite to protect users by securing their systems from attack by hackers and their governments.

Thank you for the interest in our work.

Rouzbeh

1 Automotive Networks Strive To Satisfy Safety And Bandwidth Needs

<http://electronicdesign.com/communications/automotive-networks-strive-satisfy-safety-and-bandwidth-needs>

2 <http://www.ieee802.org/3/NGAUTO/public/jan17/index.html>