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Telemedicine Post COVID-19

Summary: Renowned surgeon and healthcare futurist Rafael Grossman speaks to Health-Management.org on telehealth, robotic-assisted surgery and a new healthcare mindset in a post COVID-19 world.

What are your most important impressions in terms of attitudes towards and implementation of telemedicine in the present COVID-19 environment?

One good thing that has come out of this horrible pandemic and all this suffering, cost of life, resources and social and economic disruption, is that finally, everyone is realising that telehealth, telemedicine, remote connectivity and communication, make sense.

We've been struggling for decades to get telemedicine adopted, to change the culture of the healthcare community to embrace telemedicine and for regulators to change regulation. To get administrators in hospitals to have the vision that virtual connectivity is not a substitute but a complement to what we do through physical contact has happened quickly because we have had the desperate need for it.

Where do you think the medical profession could take telehealth implementation once the COVID-19 crisis has passed?

When it comes to telemedicine, I keep saying it's just like making a phone call but better. I think the biggest gain we will have is that people will see it as a natural way of communicating in healthcare, just like they see it as way of communicating in non-healthcare related life. You can call your mother 1000 miles away on FaceTime, WhatsApp or Skype; in the same way, you can call your provider.

The most important point is that using telemedicine is not a substitute to what we do: it's a complement. Sometimes you see the patient physically, sometimes via video. Sometimes you call the patient, sometimes you email and sometimes you send out a paper letter. Telemedicine is just another way of communicating under special circumstances and in response to needs.



How can we keep such telecommunications efficient?

The American Telemedicine Association has very good guidelines on the correct protocol for a telehealth visit. Without such guidelines, people could be lost. I think that is very important to first gain new people adept with telemedicine and to retain and encourage the ones who are fearful.

How do you think healthcare can leverage the COVID-19 experience with telemedicine and telehealth? Should CIOs be developing business plans to support future telehealth deployment?

Right now we are in a warzone. But I think that if there is time and if there are resources, then they should be thinking about the future, perhaps a year from now.

Organisations have pillars like finance, patients, community and employers etc. Telemedicine has to be a pillar. The biggest pillar is communications and telemedicine has to be another facet of communication. Years from now when everyone is deploying telehealth, you want to be the leader. You have to be the one people follow, not the follower.

The Office for Civil Rights at the U.S Department of Health and Human Services announced lifted penalties for healthcare providers that use telehealth during the COVID-19. Should this lift remain in place once the crisis is over?

This was an excellent move. I think the privacy of health information and the privacy of any personal information is very important. It's something that should not be violated. But the paranoia over the privacy of health information has been one of the major hurdles for the implementation of e-health, telehealth and telemedicine. After this pandemic ends, we will have a change of mindset towards

Do you see greater potential for remote surgery because of this healthcare crisis?

Absolutely. One of the facets of AI is robotics. Robotic-Assisted Surgery (RAS) is the next step of the evolution of surgery, just like 20-25 years ago minimally invasive surgery was the next step. Now we see technology is exploding in the UK and in the other parts of Europe, which is really going to revolutionise the way people are going to approach RAS. If we add an AI component, you could have an RAS that is somewhat semi-autonomous. I think that we are decades away from autonomous robotic surgery but semi-autonomous RAS is not far off.

The most important point is that using telemedicine is not a substitute to what we do, it's a complement

use of tele-health. We will see that we can still keep the conversation private and use the best tools that we have to keep the conversation and the data safe but, at the same time, not be an obstacle to communication.

Where else would you like to see technology disrupt healthcare during and following the COVID-19 crisis? Is there anywhere that is ripe for a 'shake-up'?

I think that there are so many areas where we can improve. From education to trained diagnostics to therapeutics, there are so many tools out there – and most of them created for non-medical use. They can, potentially, be life saving tools.

From connecting by video to virtual reality, augmented reality and extended reality for education and simulation, to therapeutics within the operating room, for example. I think we have seen some advances in these areas but we need to do much more to make adoption standard and routine. Again, this is not a substitute but as a tool and complement to traditional teaching methods and delivery.

Let's talk about wearables as well. We have all this data that is floating in the cloud and nobody is using it. This data is very powerful and big data and its analysis brings us to Artificial Intelligence (AI) with Machine Learning (ML), robotics and Natural Language Processing (NLP). These three facets constitute AI and can be exploded in healthcare in ways we cannot even imagine. I think that's where we are going. ML, Deep Learning, robotics and NLP are going to have a tremendous impact on healthcare but we need to push it. The times of crisis are the times we have to become more inventive and innovative. That will be a good sequel to this COVID-19 crisis.

How will telehealth and RAS play into the concept of the decentralised hospital where people can receive care at home?

For those of us fortunate enough to be living within first-world healthcare systems, brick and mortar hospitals will become more decentralised over the next five years. It's already happening in the UAE and with Kaiser Permanente. They already have a lot of their patients using wearables, transmitting data to providers and they can go to the cloud and find their data and communicate with this material. The COVID-19 pandemic will awaken a lot of such factors for improving healthcare. Telehealth has proven it's worth and it will open up our minds to other possibilities. ■

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