**Emerging Health Care Technology Trends**

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Technology is moving at a rapid pace for those that started in healthcare decades ago. For people that are just starting their careers there is no reference to see how it has evolved and no groundwork that can help understand the pain of the way it is all coming into existence. For workers that are comfortable with technology there may be little patience for those that seem to put off progress. The best practice will always be to never stop learning. This paper will spotlight three emerging healthcare technologies and some pros and cons from a personal point of view.

**Emergency Health Care Technology**

**Telehealth**

Telehealth has a broader definition than most understand. Depending on the setting some would view telehealth as an alternative to an office visit. A visit viewed on a device instead of a patient being seen in a one-to-one office setting. McGonigle and Mastrian have the definition as any type of delivery of patient education or care using telecommunications (2018). Transmitting images of x-ray and study films, pictures of a patient wound or fracture, medical records being transmitted, apps that patients use for care and advice, and this will also include patient visits with providers via phone or video (McGonigle & Mastrian, 2018).

COVID-19 pushed us into Telehealth with no apologies. Visits are being performed on a phone call or with a Facetime or Zoom meeting. These were not previously covered by insurance but considering the pandemic most insurance have started covering telemedicine visits at the same rate as an onsite office visit (McElroy et al., 2020). The hope is that this will remain an option once the pandemic is under control.

The great part of telehealth is the convenience and safety of all involved. Exposures are decreased, the issues of transportation are nullified and those that have a difficult time being mobile are more comfortable being at home. The bad part of telehealth from an office visit standpoint is that no hands can be laid on a patient. Assessments are incomplete. Things can be missed or overlooked as the patient may not be aware of a lump or a mole or a discoloration that could aid in an early detection. In poorer communities there may be limited access to Wi-Fi or devices that can be used properly.

Telehealth is something that can really be utilized to help people with little access to healthcare or insurance. Telehealth allows patients to gain access to facilities in outlying areas where hospitals have ceased to exist and provide rooms with video access for people left with no ability to travel out of town for care. Libraries that are local can dedicate a room to serve this purpose. Police stations can be considered if neither of these is an option to gain medical care. The concerns can be handled by allowing access within an area of trust as mentioned previously.

**Prescription Surveillance Data Bases**

Prescription data bases have been around for a few years and it allows access to personal prescription information and is available in most states. This was in response to the increased overdose deaths in our world. Once an investigation was launched it was found that patients were utilizing multiple doctors and pharmacies and manipulating family as well while developing the infamous opioid crisis. This data base was put into place to identify physicians who were overprescribing pain medication as well as people receiving large amounts of opioids that were also putting them in the hands of addicts for financial gain ((Holmgren et al., 2020).

The great part of this system is that it holds healthcare providers accountable for what is put into the public hands. There must be responsibility for what is developing into our greatest pandemic in human society. The worst part of this is the elderly arthritic patients that must endure the same scrutiny as someone who abuses medications. Imagine primary care providers and rheumatologists having to ask 80- to 90-year-old patients to come in for urine drug screens or pill counts for their pain medication. How inconvenient, embarrassing, and demeaning? There is already a stigma in asking for care for pain and now it is intensified and unfair to those that truly require relief.

Prescription surveillance data bases have existed for a least a decade. They did not hinder care as much as protect the physician in the beginning. Now it is being utilized to truly gain control of an out-of-control system. The way to improve upon this is to allow providers to see all states and not just their practicing state. The best way to handle patients is to always let them know how medications are monitored and managed. It is necessary and due to people, that are unable to manage medications on their own. If people realize everyone is being monitored, it will cause less resentment and they will not feel like they are a lesser human being looked down upon.

**Wearable Devices**

So many things could be considered a wearable device: Holter monitor, Lifeline necklace, pacemaker, wearable blood glucose monitors, OnStar is not worn but serves a similar purpose. This is developing into something called physiolytics (Mettler & Wulf, 2020). Healthcare cost has caused employers to encourage better health practices by promoting devices that can monitor steps taken, glucose levels, weight, heart rate and rhythm under the guise of self-monitoring (Mettler & Wulf, 2020). The increase of chronic diseases and their effect on the economy are driving these tools in a more controlled direction (McGonigle & Mastrian, 2018).

The benefit can easily be that people find more motivation as their smartwatches tell them they need to stand up, walk, breath, get more steps, go to bed earlier. It is an encourager for those that get caught up in work or gaming or life. The concerns are that little by little humans are allowing more and more of their individual rights and privacies to be given up under the muse that it will save them money and better the health of everyone.

Providing ever person that would like a device that encourages them to take better care of themselves is the only fair option if we truly want our society to get healthier. Encourage parents to take more control of the devices their children have and teach them how to use parental controls for safety. Find a way to get new technology into a parent’s hands first with the confidence to apply the necessary controls would be our best answer to helping the children develop healthy skills before adulthood.

**Conclusion**

The conclusion is progress will come with or without permission and it can be great but very exasperating. As a species we have been conditioned to do as we are told for the sake of progress or science. There are few people willing to question or combat the norm that is being suggested. Everyone would rather believe that advancement is good and will only serve a greater purpose. Smart televisions, smart watches, smart phones, Alexa, and technologies that were not known to exist till recent decades have changed our world.

People that have worked with developing technology have shared concerns over the years on podcasts and television interviews about evolving technology and it may encourage the people that are so easily influenced by progress to give a little push back when given choices. Everyone should read *Fahrenheit 451* and realize Ray Bradbury’s future is playing out around each of us every day. For me, it is frightening. For young tech savvy people, it is just part of the process. There will always be a price to pay for any move forward. Ladies and gentlemen, there are no free lunches!

**References**

Holmgren, A. J., Botelho, A., & Brandt, A. M. (2020). A History of Prescription Drug Monitoring Programs in the United States: Political Appeal and Public Health Efficacy. *American Journal of Public Health*, *110*(8), 1191–1197. https://doi.org/10.2105/ajph.2020.305696

McElroy, J. A., Day, T. M., & Becevic, M. (2020). The Influence of Telehealth for Better Health Across Communities. *Preventing Chronic Disease*, *17*. <https://doi.org/10.5888/pcd17.200254>

McGonigle, D., & Mastrian, K. G. (2018). Nursing informatics and the foundation of knowledge (4th ed.) Burlington, MA: Jones and Bartlett Learning Pub.

Mettler, T., & Wulf, J. (2020). Health promotion with physiolytics: What is driving people to subscribe in a data-driven health plan. *PLOS ONE*, *15*(4). https://doi.org/10.1371/journal.pone.0231705