Technology Vs. Patients in Healthcare

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Technology and the ways that it ties into healthcare are very important during today's time. As years go on and time passes technology begins to improve every day. Advancements that are made in technology are so important. Many may think that technology can have a negative impact on others, and it is slowly taking over but, in many aspects, it is a very helpful tool, healthcare being one of them. There are many benefits with technology within the world of healthcare. For providers and physicians, it helps them every day to keep track of many different things as well as take care of their patients to create the best outcome and plan for them leading them to a healthy lifestyle. With this being said many people know the ways that technology can help people who work in healthcare, but people may not know how much it can truly help from a patient's perspective. There are so many ways it can help a patient. Communication, access, research for medicine, health records that are easily accessible. These are just some of the many things that technology has helped with improving patients experience with the healthcare system.

When it comes to advancements in technology with the positives also comes many different negative outlooks that could be discussed. With these advancements in technology some people can feel that their information is out for the public or can get lost easy. It can make patients feel a loss of trust knowing that their information can be so easily accessed by many. Privacy is a major part of healthcare and without the proper route to privacy the patient connection with their provider can be dismantled. In many ways a person could say the benefits outweigh the complications which is true, but many people have a hard time looking past that. That is why it is important to understand that with overall technology improvements technology also will improve within its respected fields like the healthcare system. Going into more detail with this paper being able to show the importance of technology from a patient's perspective in todays practice of modern medicine. With advancements in healthcare and technology patient resources have improved with increased access to materials that are helpful to them it can also arise the different ideas of privacy not being fully protected and not getting that in person doctor to patient connection with the proper compassion or empathy.

Technology is all around us and is something that even if people try to escape it, it is very hard to do so. Almost everything that people do whether it has to do with work, school or everyday life has some form of technology involved. "For patient-oriented mobile health tools to contribute meaningfully to improvements in healthcare delivery by facilitating patient education

and engagement or enhancing patient-provider communication, widespread acceptance and use of such tools by patients is critical" (Baur et al. 2017). With the idea of having better communication within healthcare because of improving technologies, this means that people who may be more socioeconomically at disadvantage will be able to have better access to healthcare and treatment opportunities. If consumers can have the correct sources that are put out there then improvements for those patients will occur in the proper way.

Technology within healthcare and patient use is something that is on the newer side. Many studies have shown different healthcare apps that people have downloaded when they own smart phones or advanced technology that help them be able to track different things within their body and continue to live healthy lifestyles. By having access to these resources, it can help many people to be able to keep track of their health and even avoid situations where health worries can increase very quickly. Another important factor of technology is electronic health records and patient portals as well as their impact on patients. Many patients' doctors' offices and providers have easy access for their patients with technology s they are able to access their own records and healthcare history. Some patients though may not know that this is something that they have access to. "Among 815 participants who responded to questions about their patient portal, most did not know whether their clinic has an electric patient portal (53%, n=433)" (Baur et al. 2017). Without the proper education by each provider or healthcare system a patient will not be able to have the full access to benefit themselves as well make it an easier patient to provider relationship when working through different disparities. Leading a patient in the right direction with mobile devices tying it to healthcare is something that is still improving but with the improvements can make healthcare as whole run much smoother for a patient.

Another up-and-coming part of technology within healthcare is telemedicine. Ever since COVID-19 there have been many instances of telemedicine. It is a way for a patient who may not be able to meet with a healthcare provider in person to be able to get a diagnosis and treatment either over the phone or digital call because of technology. "In these contexts, the information and telecommunications technologies that constitute telemedicine have the potential to radically reshape health care in both positive and negative ways. In particular, over time, the widespread adoption of clinical applications of telemedicine could fundamentally alter the personal, face-to-face relationship between patient and practitioner that has been the model for

medical care for generations" (Institute of Medicine 1996). Obviously like anything with the positives there can be some negatives. For the most part telemedicine since it is being used more in today's time then before has helped for the better making things more accessible to patients. "The integration of clinical, educational, and other applications of telemedicine into health care is inextricably linked to a dynamic telecommunications industry…" (Institute of Medicine 1996). There are many ways to approach telemedicine, there are options for phone calls, video calls or different types of messaging.

There are many different aspects that can help from a patient's perspective when it comes to telemedicine. What telemedicine is mostly known for is the virtual healthcare visits, many people use this for mental health needs as well as physical needs if it's just an easy check in. Another part of technology that can help many patients that most people may not know about it's the idea of monitoring different levels virtually. This may sound slightly confusing at first, but it is another advancement that many practices are beginning to incorporate. For example, if a person has high blood pressure a doctor will probably send a blood pressure cuff to the patient's house. With that the patient will track their blood pressure once or twice a day to make sure the levels aren't skyrocketing as well as keeping in communication with their doctor through a telemedicine kind of mobile app with data of their information. With that being said, having this easy access to devices through telehealth obviously is such a positive in today's society. Another thing that technology is good for from a patient's point of view in the healthcare field is scheduling appointments. By being able to check if there is a wait or when there are appointments available to be able to schedule. It also makes it easier for the provider to be in contact by phone call or messaging if things need to be changed or rescheduled.

One other huge improvement to healthcare through technology is something called the electronic health record also known as EHR. It is exactly what is sounds like, an online version of a patient's chart with all their medical history and records making everything easily accessible. "The synthesized evidence from these studies revealed a positive relationship between patient access to EHRs and health care engagement, addressing 6 categories of health care engagement dimensions and outcomes, including treatment adherence and self-management, patient involvement and empowerment, health care communication and relationship, patient satisfaction and health outcomes, use of health care resources, and usability

concerns and barriers" (Alomar et al 2024). Looking at further research patients appreciate having access to their digital records. It helps them to be involved as the patient in their healthcare process making them more comfortable with decision making. Having a collaboration health care provider to patient relationship makes more people just interested in being able to go to a doctor's visit and keep up with routine checkups to make sure that they are living in a healthy state. Another great thing about an EHR and having access as a patient is it helps with the education aspect. Being able to educate a patient and help them gain the knowledge they need to understand basic health guidelines.

With having access to an electronic health record a patient can adhere to many different regimens improving health. "This increased awareness empowers patients to take an active role in managing their health. Patient access to their medical records through a PHR connected to an EHR, which included wellness reminders, helped them take action and adhere to their treatment plans. In addition, EHRs can facilitate automated reminders for medication schedules and upcoming appointments, annual visits, and screenings." (Alomar et al 2024). By having these reminders when it comes to prescribed medication it helps patient to accurately be able to take their medication, so they aren't missing doses and falling behind. If a patient misses a dose of medication, they are consistently taking it can mess up the bodies reaction to it when beginning to retake it again. With these technology advancements it helps to make the patient more at ease having them feel safer when taking their medications and understanding how it can work on the body.

"Among patients who logged into the hospital-based patient web portal with home access to EMR, 37% reported having increased knowledge about their diseases and treatment" (Alomar et al 2024). These statistics are proving that with easy access to technology it is helping the patient to understand how they are responsible for themselves as well as their provider helping them. Having patients be able to access their electronic health records helps them to feel more prepared when entering a doctor's visits and then post doctors visit communication with educational videos and step by step directions of at home care. There also can be electronic doctor's notes sent to a patient record so they have access to notify their work or school for missing because of illness or injury.

The potential for technology within the healthcare system is so important especially in today's society. By looking at the patient's perspective from every aspect and collecting research on the improvements of technology within healthcare it opens the doors to many different opportunities. In the healthcare area as a patient having easy access to records, easy communication with providers and fast results with testing can help to solve problems and come up with solutions much faster. Not only is the patient able to leave a situation with answers but they are able to feel confident within their decision making. Obviously, there are some things that make technology look not so great with the privacy concern aspect but with improvements being made every day these things can be fixed to make a patient feel more secure and safe within their situation. By making sure the patient is number one in every situation it helps to make things easier and more accessible to a patient making sure they are at a maximum level of comfort with their care. Overall, being able to find a balance between understanding that technology is growing every day and continuing to improve as well as knowing that the advancements that it has made in its desired fields are already so important. Advancements will continue as the healthcare system grows making things even more easily accessible for patients then they already are. Having patients accept these advancements with technology will help to understand the modern-day technology as well as give patients better more useful care to benefit in their favor.

Works Cited

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