

An insight to Telemedicine, it's Benefits and Disadvantages

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Introduction

Although not a novel health care providing field, Telehealth, has seen a major rampant use after the Coronavirus Disease (COVID 19) pandemic surge. It evolved as being the most safest technology, to provide quick and easiet health access to patients through telecommunication tools.

Objective

The article aims to discuss Telemedicine, an approach to servicing public with health care concerns. Simultaneously highlighting the positive and negative impacts it has on the serving Healthcare community and the people it is serving.

Conclusion

With the current expansion of telemedicine, aided by government-provided funds and the new ongoing developmental guidelines, telemedicine has already adjusted well in the community. While providing miraculous results in its field, the question of in-person healthcare service still prevails with a doubt because at the end the decision making is all impacted by the healthcare workers.

Keywords: Telemedicine, Artificial Intelligence, COVID-19 pandemic, Health Equity, Limitations, Health plan

Imagine life in a pandemic with no access to health facilities, not even to identify a trivial symptom that ends you up in a grave condition. Fortunately, Telemedicine, an innovative healthcare delivery model can deal well with such circumstances by providing care to under-resourced populations for their underlying medical conditions and formulating strategies to alleviate public health concerns.

Highlighted in the same magazine issue, clinicians believe that with growing empowerment amongst patients about their health condition, when referring to soft skills, 82% said that it's important for them to exhibit active listening and empathy towards the people they serve. As a result, clinicians are calling for guidance on when to use telehealth and how to transfer their soft skills. On the other hand, 49% believe that the allotted time does not allows them to provide satisfactory care to the patients. Some other limitations to telehealth include health disparity where patient distrust or cultural acceptance to virtual visits potentiates the gap to deliver through this system [7].

Above all the biggest limitation remains the accessibility to technological devices and having no technology literacy i.e., one's ability to use, manage and understand technology in approaching to their appropriate health department, this had been specifically pointed in the geriatric population for its restricted use. Many rural areas still do not have cable wiring or other kind of high-bandwidth telecommunication access required for more sophisticated uses [8].

Virtual health care model has greatly evolved and proliferated in small time moving from only virtual urgent care clinic to range of services enabling longitudinal virtual care in multiple medical domains, such as psychiatry being on the top of the list which had substantially maintained good patient turnover getting advantage from this facility [8]. Currently governing bodies are being made to scrutinize and reframe the telehealth infrastructure by introducing guidelines for clinicians to practice telemedicine by the book of laws made by their own state with proper tracking and updates on the burning community issues.

Telehealth is a virtually enabled care provided to patients by the use of digital information and communication methods via basic telecommunication tools, as simple as text messages, phone calls, emails or through, a more organized online health portal allowing Artificial Intelligence(AI) driven video consultations with medical practitioner's who may use digital instruments like tele-otoscope or tele-stethoscope to make a remote medical diagnosis, with proper evaluations required for making appropriate referrals [1]. In 2018 Google and Verily, developed a new AI tool to predict a person's risk of cardiovascular disease from an eye scan [2]. For virtual consultation many algorithms have been made in the past, a worthy mention is from a currently running Lemon Aid Health model which works by mobile app, collects information from online filled questionnaires by patients about their current illness, match the provided details with the medical practitioner for urgent consultation within few minutes. On Patient's end telemedicine grants access to patients to view their diagnostic results like labs and digitalized imaging for health care management purpose [3]. In the past, virtual telemedicine had been implemented as a default consultation before the In-Patient visit for some departments like anesthesia, in some hospitals of the USA [4].

In the face of recent COVID-19 pandemic, a booming surge in the field of telemedicine had been noticed although it had been part of medical system since years and was dealt similar to In-Person Visits. Such tele visits were primarily sponsored by private insurance companies and were re-imbursed in the same manner as the alternate in person visits. Telehealth access not only promoted a platform for its use in vast categories ranging from acute, chronic, primary or specialty care in delivering medical advice efficiently but also simultaneously mitigate staff exposure to vast majority of contagious diseases. The utility of telemedicine help preserve Personal Protective Equipment (PPE), improves surveillance and feedback, and minimize the impact of patient surge on clinicians. One of the major perks of tele-medicine observed was health equity; valuing everyone equally, avoiding any social, economic and environmental inequalities or historical and contemporary injustices, in providing patient care [5].

Telemedicine served as an undeniable hope for delivery of health care to patients especially during the pandemic time. Even with it's such a pertinent role in the health care sector, telemedicine can never replace delivery of in person care offered during personal visits of patients.

The goal is to broaden its horizon by making its access easy to all communities in terms of affordability as well as for improved outcomes. Investment in virtual care has also been noticed to be statistically skyrocketed recently, opening doors for further innovations in optimizing the hybrid health care system. New policies and implementations have been made in Medicare and Medicaid health plans in physician fee schedule as a permanent change to expand the circle of tele medicine delivery and usage [8][9].

At the end , uncertainty still exists to the fate of expanded telehealth as that may lose their waiver status when the public health emergency ends. It is believed that telehealth can be an alternative to in-person health, but not a complete replacement to the provider relationships.

References

1. NEJM Catalyst. What is telehealth? catalyst.nejm. Feb 1,2018. doi/full/10.1056/CAT.18.0268.
2. Loria K. Google has developed a way to predict your risk of a heart attack just by scanning your eye. Business Insider. February 20, 2018. <http://www.Businessinsider.google-verily-predicts-cardiovascular-disease-with-eye-scans-2018-2>.
3. U.S online doctors. Treating you better. Lemonaidhealth. <http://www.Lemonaidhealth.com>.
4. Diane C S, Katherine P. Role of Tele health in Pre-Anesthesia Evaluation. AANA J. 2019 Feb;87(1):43-49. Vol. 87, No. 1. <https://nurseanesthesiology.aana.com/role-of-telehealth-in-pre-anesthetic-evaluations>.
5. Liburd L. CDC COVID-19 Response Telehealth and Health Equity. CDC. September 15 2020. http://www.emergency.cdc.gov/coca/ppt/2020/2_COCA_Call-Slides_091520_Final.pdf .
6. Siwicki B. Here are the major issues facing healthcare in 2021, according to PwC. Healthcare Information and Management Systems Society-HealthCareIT news. December 16,2020. <http://Healthcareitnews.com/news/here-are-major-issues-facing-healthcare-2021-according-pwc>.

Face to face interaction with the patients is absolutely a vital step in building confidence with the patient allowing physicians to gain patient's trust in disclosing their full medical history and also simultaneously providing them assurance of medical confidentiality.

COVID pandemic, the one of its kind created a huge burden upon health care system. Telemedicine employed in an acute state of pandemic took its toll because of the lack of uniform COVID coverage policies and hurdles in workflow reconfiguration by clinicians, it all created an uneven distribution of healthcare services. Emerging as a part of health system explored extensively during pandemic time, telehealth was initially unable to provide consistent health benefit because majority of primary providers who were serving had different experience level causing some conflicts and disparities, but it has been now addressed with rightsizing and uniform code of conduct [6].

Advocates of Telemedicine claims it is beneficial for patients who need the care of a specialist but faces barriers like transportation, extensive coverage distances, long waiting time per visit, missing work/school, here this remote facility makes it possible for you and your primary care physician to leverage the expertise of specialists who are not physically available [5]. In parallel a powerful push had been given to decentralizing the clinical trials as well, Food and Drug Administration(FDA) had considered and published pandemic-specific guidance for trial sponsors, institutional review boards and investigators on prioritizing and ensuring the safety of their trial participants along with maintainance a risk reduction to trial integrity [6]. Even though FDA issued guidelines on clinical trial using telemedicine; It is not possible at all times for example in situations where the patients need in person care if they develop serious reaction to drugs. According to an edition of The Forbes magazine, clinicians are predicting a blended approach to future healthcare visits by telecommunication, with 63% forecasting that most consultations between clinicians and patients will be made remotely and, 49% saying most healthcare will be provided in a patient's home instead of in a healthcare setting [7].

While clinicians may save time and see more patients, telehealth comes as a blessing, but on the contrary more than half of clinicians believe telehealth will have its repercussions on their ability to demonstrate empathy with patients hampering their doctor patient relationship as there will be no in-person meetings.

7. Kelly J. The Forbes magazine April 2022 a New Survey Shows That Up To 47% Of U.S. Healthcare Workers Plan to Leave Their Positions By 2025. Forbes. April 19 2022. <http://www.forbes.com/sites/jackkelly/2022/04/19/new-survey-shows-that-up-to-47-of-us-healthcare-workers-plan-to-leave-their-positions-by-2025/?sh=3778dc16395b>.

8. Bestsenny O, Gilbert G, Harris A, Rost J. Telehealth: A quarter-trillion-dollar post-COVID-19 reality? McKinsey and company. July 9 2021. <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>.

9. Weigel G, Ramaswamy A, Sobel L, Salganicoff A, Cubanski J, Freed M. Opportunities and Barriers for Telemedicine in the U.S. During the COVID-19 Emergency and Beyond. Kaiser Family Foundation. May 11 2020. <http://www.kff.org/womens-health-policy/issue-brief/opportunities-and-barriers-for-telemedicine-in-the-u-s-during-the-covid-19-emergency-and-beyond>.