

# The Use of Telehealth During the COVID-19 Pandemic: A Case Study

Prashanth Kumar Alay<sup>1</sup>

<sup>1</sup>Department of Health Management and Informatics, MU, School of Medicine.

\*\*\*

## ABSTRACT

Telehealth, also known as telemedicine or virtual healthcare, is a type of healthcare delivery that uses technology to provide clinical healthcare services remotely. It allows patients to receive medical care from a healthcare provider using video conferencing, phone calls, messaging, or other electronic communication methods. The COVID-19 pandemic has had a significant impact on healthcare delivery worldwide. With the need for physical distancing and reducing exposure to the virus, telehealth has emerged as a valuable tool for delivering healthcare services. This article provides a comprehensive review of the current state of telehealth adoption, implementation, and challenges during the COVID-19 pandemic. We also discuss the potential benefits and limitations of telehealth and highlight some of the key considerations for successful telehealth implementation in the future. Our findings show that telehealth has been widely adopted during the pandemic, with significant benefits for patients and providers.

**Key Words:** Telehealth, COVID-19, Outpatient (OP)

## 1. INTRODUCTION

Telehealth has become increasingly popular over the last few years, but its use has surged even more during the COVID-19 pandemic, as it provides a way for patients to receive medical care while minimizing the risk of exposure to the virus. Telehealth services can be used for a wide range of medical issues, from routine check-ups to the management of chronic conditions. The COVID-19 pandemic has resulted in unprecedented challenges for healthcare systems worldwide. The pandemic has disrupted traditional healthcare delivery systems, and there is a growing need for innovative solutions to provide quality care to patients while minimizing the risk of exposure to the virus. Telehealth has emerged as a promising tool for delivering healthcare services during the pandemic. Telehealth refers to the use of digital communication technologies to provide healthcare services remotely. In this article, we review the current state of telehealth implementation during the COVID-19 pandemic and discuss the potential benefits and limitations of telehealth.

## 2. TELEHEALTH IMPLEMENTATION:

The pandemic has accelerated the adoption of telehealth services worldwide. According to a recent report by McKinsey & Company, telehealth visits in the United States increased from 11% in 2019 to 46% in 2020. Telehealth has been used to provide a wide range of services, including primary care, health services, and chronic disease management. The use of telehealth has also been extended to vulnerable populations, including older adults, individuals with disabilities, and those living in remote areas.

## 3. CASE STUDY:

A Health clinic in a suburban area experienced a significant increase in demand for health services during the COVID-19 pandemic. The clinic was facing several challenges, including limited resources, concerns about staff and patient safety, and restrictions on in-person visits. To address these challenges, the clinic implemented a telehealth program to provide health care services remotely

The telehealth program consisted of video and phone consultations with health providers. Patients were able to schedule appointments through the clinic's website or by phone. The clinic provided patients with information on how to prepare for the telehealth visit, including instructions on how to download and use the video conferencing software.

The telehealth program was well-received by both patients and health providers. Patients reported high levels of satisfaction with the telehealth visits, citing convenience, reduced travel time and cost, and improved access to care as the primary benefits. Health providers also reported positive experiences with the telehealth program, citing improved efficiency, reduced wait times, and increased flexibility in scheduling appointments.

Table: 01 Percentage of Outpatient using Teleconsultation

Day	Tele Consultation	Outpatient Visit
1	28	72
5	41	69
10	55	45
15	68	32
20	74	26
25	82	18
30	92	08

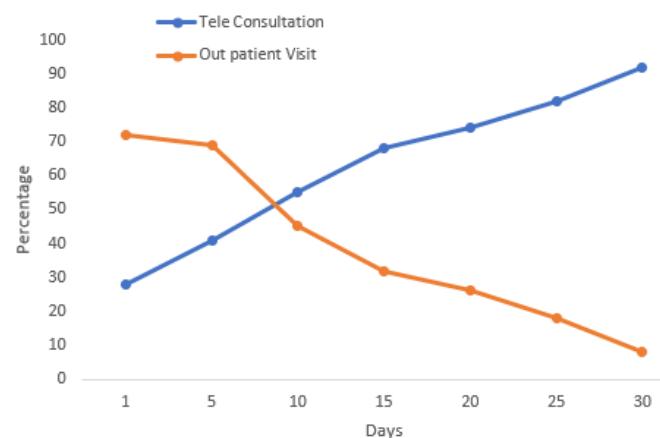


Figure 1

Patient satisfaction scores were high (90/100) for both telephone and video consultations. However, patients were more likely to consider using phone/ video consultation (92% of patients) than patients coming to Clinic. The Telehealth offers an alternative to F2F during the COVID-19 pandemic.

- Reduced travel times.
- Reduced waiting times.
- Reduced impact of travel on symptoms.

#### 4. DISCUSSION

The COVID-19 Action Team achieved the set goal of 90% Tele and Video Consultation by week 4. The use of technology, specifically the use of Tele and Video Consultation.

The rapid implementation of Tele and Video Consultation was achieved due to technical support provided by the IT team at the clinic helped the health staff to support the patients suffering from COVID-19.

#### 5. KEY CONSIDERATIONS FOR SUCCESSFUL TELEHEALTH IMPLEMENTATION:

Successful telehealth implementation requires a comprehensive approach that addresses several key considerations. These include ensuring equitable access to telehealth services, providing appropriate training for healthcare providers and patients, developing clear guidelines for telehealth services, and addressing legal and regulatory issues related to telehealth. Additionally, ongoing evaluation and feedback from patients and healthcare providers are critical for ensuring the effectiveness and sustainability of telehealth services.

#### 6. BENEFITS OF TELEHEALTH

Telehealth has several potential benefits, including improved access to care, reduced travel time and cost, and increased convenience for patients. Telehealth can also improve the efficiency of healthcare delivery by reducing wait times and improving the flow of patients. Telehealth has also been associated with improved patient outcomes and reduced hospital readmissions. Some of the benefits of telehealth include:

**Improved access to care:** Telehealth can provide medical care to patients who live in remote or underserved areas, or who have difficulty traveling to a healthcare facility.

**Convenience:** Telehealth eliminates the need for patients to travel to a healthcare facility, which can save time and money.

**Reduced exposure to infectious diseases:** Telehealth can help prevent the spread of infectious diseases by reducing the number of people who need to visit a healthcare facility.

**Improved communication between patients and healthcare providers:** Telehealth can provide patients with more frequent and convenient access to their healthcare providers, which can improve communication and facilitate better care.

**Cost savings:** Telehealth can reduce healthcare costs by eliminating the need for patients to travel to a healthcare

facility, and by reducing the need for hospitalizations and emergency room visits.

#### 7. LIMITATIONS OF TELEHEALTH

Despite the benefits of the telehealth program, several challenges were identified. These included issues related to technology access and literacy, privacy and confidentiality concerns, and the need for additional training for health providers on telehealth best practices. Additionally, telehealth services may not be suitable for all patients or medical conditions, and in some cases, in-person visits may still be necessary. The clinic addressed these challenges by providing patients with technical support and training and ensuring compliance with HIPAA regulations.

#### 8. CONCLUSION

The COVID-19 pandemic has highlighted the potential benefits of telehealth for delivering healthcare services remotely. Telehealth has been widely adopted during the pandemic and has the potential to improve access to care and patient outcomes. This case study demonstrates the successful implementation of a telehealth program for health care services during the pandemic. The telehealth program provided patients with convenient, accessible, and safe access to health care services while addressing the challenges posed by the pandemic. Several challenges need to be addressed to ensure equitable access and adoption of telehealth services for health care. Addressing these challenges will require a comprehensive approach that involves collaboration between health providers, policymakers, and technology companies.

#### REFERENCES

1. [who.int/docs/default-source/coronavirus/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57\\_10](https://www.who.int/docs/default-source/coronavirus/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10) [Accessed 29 Mar 2020].Google Scholar
2. He F , Deng Y , Li W . Coronavirus disease 2019 (COVID-19): what we know? J Med Virol 2020.doi:10.1002/jmv.25766 Google Scholar
3. England PH. Number of coronavirus (COVID-19) cases and risk in the UK 2020. Available: <https://www.gov.uk/guidance/coronavirus-covid-19-information-for-the-public> [Accessed 29 Mar 2020].Google Scholar
4. Greenhalgh T , Koh GCH , Car J . Covid-19: a remote assessment in primary care. BMJ 2020;368:m1182.doi:10.1136/bmj.m1182 pmid:[http://www.ncbi.nlm.nih.gov/pubmed/32213507](https://www.ncbi.nlm.nih.gov/pubmed/32213507) FREE Full TextGoogle Scholar
5. Greenhalgh T , Wherton J , Shaw S , et al . Video consultations for covid-19. BMJ 2020;368:m998.doi:10.1136/bmj.m998 FREE Full TextGoogle Scholar
6. NHSX. Covid-19 information governance advice for health and care professionals 2020, 2020. Available: <https://www.nhsx.nhs.uk/key-information-and-tools/information-governance-guidance/health-care-professionals> [Accessed 29 Mar 2020].Google Scholar