

# Exploring the Role of SAP in Supporting Telemedicine Services, including Scheduling, Patient Data Management, and Billing

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Published In [IJIRMPS](#) (E-ISSN: 2349-7300), Volume 6, Issue 5, (September-October 2018)

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## Abstract

This paper seeks to explore the role of SAP in telemedicine. In a rapidly growing technological society, telemedicine has become an inevitable tool to provide equal opportunities for every person to seek health care services irrespective of the geographic location. New therapeutic approaches and applications can be predicted in the constantly developing field of telemedicine in the next few years. Telemedicine is revolutionizing the healthcare system and paving the way for a future oriented system that is more convenient to the patient. Telemedicine which is continually penetrating the health systems of the world is now reaping big benefits across the world. From remote villages with fixed health units to busy cities, telemedicine can reach out to the needy patients and offer them a chance of accessing health care service [1]. Telemedicine helps patients to get the required treatment without having to be excused from work or travel long distances, and as such, those who it is most suitable include patients with busy or restricted mobility schedules. The use of technology in the provision of care means that telemedicine develops a fabric through which medical care expertise can be availed and disseminated. This not only benefits the patient but also enhances the coordination of the other healthcare practitioners and hence a streamline of better health care planning and execution. Looking at the prospect of future innovation in the field of artificial intelligence and machine learning, telemedicine has a future potential of becoming the method for diagnosing and treatment plans [1]. Given technology advancements, patient insights can be processed in the health systems' automated workflows resulting in enhanced and quicker medical decision-making. It also boosts the efficiency of health care as a right since clients in distant or underprivileged regions are offered the same high quality services as the clients from big cities. This helps in elimination of healthcare inequalities and ensures that everybody gets the appropriate medical attention. In the modern world, telemedicine is becoming more and more popular, and in this regard, it is essential to notice that health care systems and policy makers need to follow the updates. It is clear from the three cases that proper guidelines and rules need to be set regarding the patient's rights and the privacy and security of data subjected to telecommunication. It is also agreed that more has to be done in order to ensure that those providers and practitioners not familiar with information technologies are prepared for telemedicine. Telemedicine is expected to revolutionize healthcare around the world if there is good infrastructure to adopt this revolution and good policies in the country. Telemedicine is the core of the future in healthcare as it focuses on the integration of medical knowledge and technology to meet the needs of the people no matter what their situation is. As

mainly supported by this article, telemedicine will remain to define the future of healthcare through innovativeness and cooperation which will change lives as well enhance personal health [2].

**Keywords: Telemedicine, SAP integration, Scheduling, Appointment Management, Patient Data, Electronic Health Records (EHR), Data Security, Revenue Cycle Management, Automated Billing, Insurance Claims Processing, Financial Reporting, Advanced Analytics, Predictive Analytics**

## 1. Introduction

Telemedicine is an innovative field that harnesses digital disruption to converge telecommunication and medicine, bridging distance between healthcare providers and patients to improve health delivery. Conversely, SAP (originally Systems, Applications, and Products in Data Processing) is a leader in enterprise software development. But, can these distinct verticals combine to transcend the digital chasm? While telemedicine and SAP can synergize, challenges need to be overcome, and calls to action ring from varied stakeholders. No telemedicine pipeline is complete without an electronic health record system, which using versant database modeled background, offers a strong footing for electronic health records [2]. Being the building block of telemedicine, the electronic health record is called a proposed backbone of telemedicine.

Telemedicine is incredibly significant in the field of healthcare, and Microsoft Office 365's suite of applications helps to facilitate its implementation. However, it is important to acknowledge that telemedicine still operates within the realm of graphical systems. The hierarchical structure of the data is further strengthened by the utilization of MATLAB, which boasts an interface that is developed with HTML and Matlab COM. In order to optimize the efficiency of healthcare processes, streamline billing procedures, and enhance community service, the incorporation of electronic medical records, commonly known as e-records, is absolutely critical [3]. These digital records are indispensable for proper administrative regulation. However, it is crucial to recognize that as the commercial sector continues to make significant strides in the healthcare industry, there is a potential for conflict with the greater good. This necessitates the involvement of third-party watchdogs to ensure ongoing accountability.

For telemedicine to be truly effective, it demands full interoperability across different vendor models. By doing so, efficiency in the delivery of healthcare can be better improved and the standard of patient care can be even enhanced. Thus, open-source is revealed as a concept that can be used to access health records, while preserving its high-security level. This affordable solution ensures the administration of freeware interfacing to quickly retrieve and upload the records.

The integration of custom interactive solutions stands as vital in the formation of tertiary health provision. Specifically, the ease of use of the GUI proposed provides adequate Opd management and shipment billing of dental patients' services [4]. This is quite an innovative platform that has a huge potential of changing the way dental healthcare is provided and its effect is experienced by both the providers and clients. The improvement of the world for this generation and of course for the next generation means embracing modernization and technology, specifically telemedicine in the field of health care. As the population continually seeks readily available medical services, tools such as the applications of Microsoft Office 365 becomes a useful tool in the enhancement of telemedicine.

However, it needs to be pointed out there that telemedicine is a part of graphical systems. That is why the division of data into higher and lower levels, the hierarchy of information, is an essential factor in the administration of medical data. To enhance this structure more, the MATLAB is then adopted to be useful in the process. This involving the use of HTML and Matlab COM to develop the interface of the software improves the functionality of telemedicine systems and creates a mechanism of appropriate data management. Therefore, not only must sufficient care be taken to manage data, but usage of actual electronic medical records, or e-records as they are known, should also be utilized wherein feasible for the enhancement of healthcare operations [6]. Such computerized records facilitate a better approach to billing and help organizations to improve their community service. Indeed e-records become vital in the context of the healthcare industry when administrative regulation is effected well. But it should also be noted that with the involvement of the commercial sector in health care delivery, their self-interests may occasionally override the public interest. In response to this, one has to involve third-party watchdogs in order to perform continual oversight and to regulate the impacts exerted on patients and affected communities.

In this respect, to encourage growth of telemedicine, integration of the different models controlled by different vendors must be achieved. This implies that telemedicine systems ought to have the capability to interactively be in touch with or share information with a number of healthcare workers. Thus, by attaining the state of interoperability, the healthcare delivery system can be made efficient and the level of patient care can be enhanced. Moreover, during the analysis of the studies, an idea and practice of using open-source solutions are recognized as a potential solution for gaining access to the records with adequate security. This inexpensive means provided for the use of tools that are transportable concerning the freeware interfacing that makes it quite easy to gain records as well as upload records for recording. Open sources are not only popular due to their availability but also because security concerns are met through the protection of patient's rights to the data privacy and confidentiality [6,7]. In this context, the integration of custom interactive solutions can be considered as a critical deterministic factor influencing tertiary health provision. These measures can be achieved by the enhancement of friendly user interfaces for OPD management and shipment facilities for billing concerning the dental patients.

## **2. Research Problem**

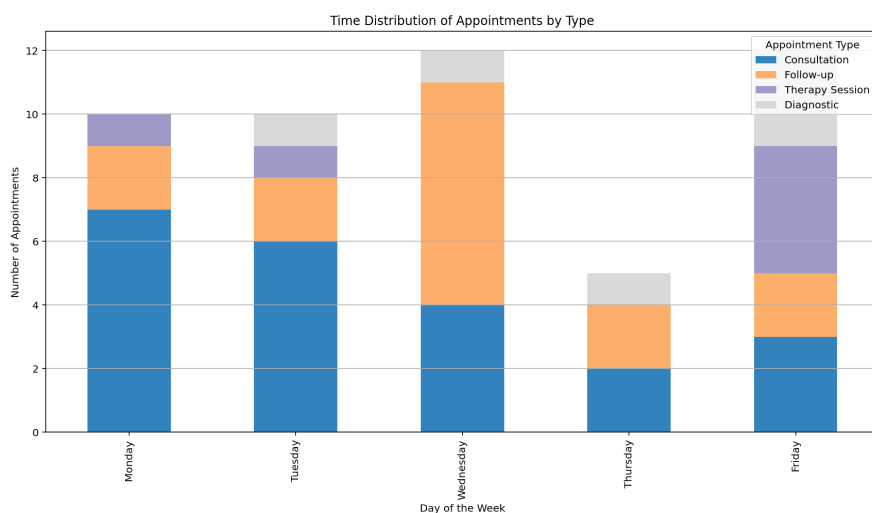
The main research problem in this paper is to review the role of SAP in telemedicine. Telemedicine is one of the best and revolutionary medical technologies that enables patient care to reach new heights using efficient and state of the art internet applications. This great system provides extensive primary health care and maintenance services such as annual examinations, counseling and treatment, pediatric and gynecological care, and ongoing support of chronic illnesses. Inexplicably though, the provision of telemedicine in the low- and middle-income countries faces some barriers that, if not eradicated, possess the ability to hamper telemedicine's efficiency in delivering care. Such difficulties are diverse and range from technological to infrastructure, financial, and cultural aspects among others. In view of these challenges, this empirical study aims at systematically determining and systematically analyzing the essential components which are indispensable for the successful implementation of teleconsultation systems [7]. Thus, in an attempt to collect and analyze data to discover the core bones of contention that would allow for overcoming these challenges and attaining stable and efficient telemedicine, the method of extensive and thorough research is proposed. When the above-stated contributing aspects are identified, it is possible to create the basis for improving the availability and quality of healthcare services for a larger population of distant regions. The dissemination of this crucial knowledge and the

implementation of the recommended solutions will undoubtedly bridge the healthcare gap, empower patients, and revolutionize the delivery of medical services in underserved communities [7]. Thus, this study holds immense promise for transforming the healthcare landscape and promoting equitable access to high-quality care for all individuals, regardless of their geographical location.

### 3. Literature Review

#### A. SAP in Telemedicine

SAP is a patient management solution that can be used outside hospital boundaries and has been adopted in many different care scenarios. In Spain, there are different examples of SAP adoption with one of them in telemedicine. The Spanish health system is mainly public and decentralized. The increasing demand for healthcare services is a common problem and the development of telemedicine projects in all the different regions can be seen as early responses to this difficult situation. Various clinical and nonclinical health fields are integrated into telemedicine to offer clients the highest quality care. The usage of the telematics system has increased during recent years considering the increase in the worldwide geriatric population, who mostly experience chronic illnesses during an age-related process [8]. Telecommunication tools have benefits that go beyond geographical limitations to meet the eye and allow high-quality healthcare operations in a faster manner. In the recent years, telemedicine is preferred in terms of Home Physiotherapy, Psychiatric Evaluation, Oncology, Dermatology, Pediatric Services, Social Work, Nutrition Services, Cardiology Health, Ophthalmology, Endocrinology, Pulmonary Health, Women's Health, Language, Speech and Balance Learning, Nephrology, Internal Health, Perinatal and Neonatal Health and Surgery Clinic. Because of this, its importance is rapidly growing day by day. On the other hand, integrating relevant technologies with healthcare might always carry some risks related to data accountability, safety, privacy, and quality of service delivery. As the number of telemedicine users has increased substantially in recent years, the number of customers has been a subject of discussion about the importance, sustainability, and profitability of integrated services [9].



**Fig. 1:** Time Distribution of Appointments by Type

Technological advances have revolutionized healthcare delivery by enabling remote clinical care, education, and health administration. Integrating telemedicine into nursing practice can deliver quality care through greater responsiveness. Telemedicine supports the provision of nursing care in the form of immediate consultation, management of chronic diseases, and early referrals [9]. Usage of real-time video consultations reduces emergency room and urgent care center visits and costs of care. It also

promotes social distancing and provides for remote care in crises such as the pandemics pandemic. Telemedicine uses diverse tools, such as instant messaging, video conferencing, remote patient monitoring equipment, smartphones, and other electronic devices and communication technology, to provide patient care.

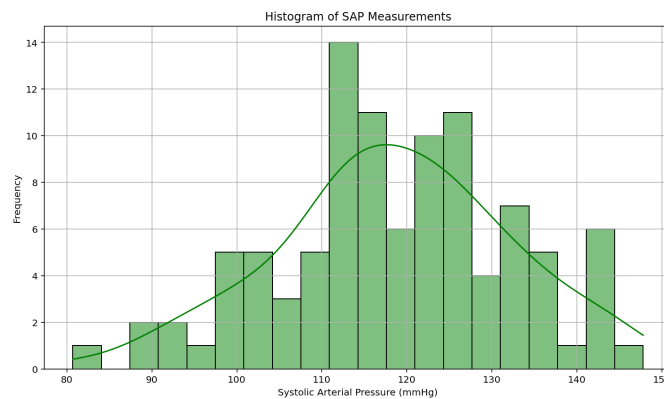


Fig. 2: Incidence of Data Breaches Over Time

**B. Streamlined Scheduling and Appointment Management**

Physician scheduling plays a critical role in influencing appointments, patient waiting time, workflow optimization, and overall hospital performance. As a result, having a streamlined approach to scheduling, managing appointments, and maximizing physician utilization can have a significant impact on the health sector. The importance of this study lies in the fact that effective organization of physician appointments and management reduces time wastage and human resource inefficiencies, while simultaneously boosting productivity. This indicates that 15-25% of patients who seek healthcare services miss their appointments with the doctors. There are factors that support this tendency, such as long waiting for treatments, patient’s forgetfulness, and journey to hospitals. Due to numerous factors which have been seen above, failure to attend to the scheduled health check-ups has several social implications. Firstly, receiving medical services and diagnoses and their provision take much time resulting in high costs to the national economy. Furthermore, delay in pay, and forgotten appointments not only cost physicians and healthcare officials their time but also result in longer queues and patients complaining.

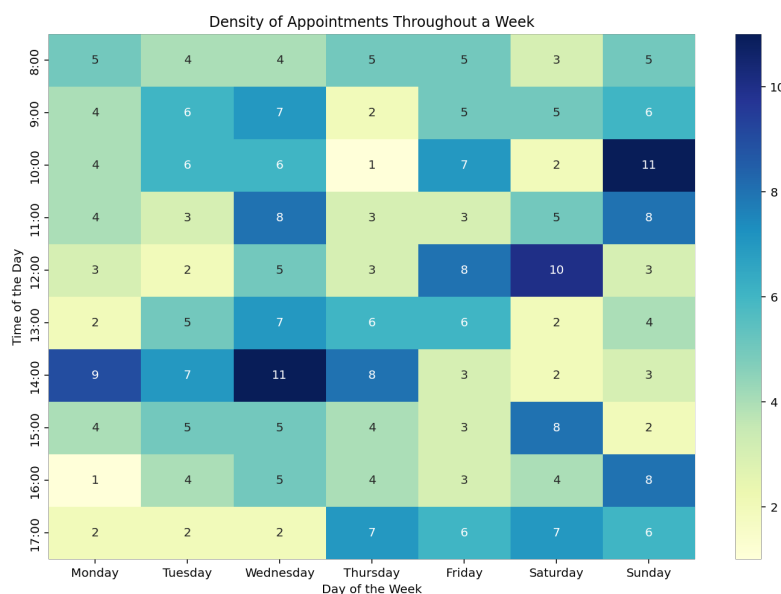


Fig. 3: Density of Appointments Throughout a Week

Also, high appointment rates increase the number of examinations which in turn increases unnecessary expenses and proper time management. It is, therefore, necessary that effective interventions are upheld to identify these concerns and enhance every physician's schedule for the improvement of the entire healthcare system. Some of the solutions that may help include the use of technology to set work schedules that dictate how physicians' appointments are to be scheduled. These systems take other things into account hence are in a position to arrange an appointment in consideration to the patient's choice, the available doctors, and procedures that may be needed in case of an appointment. In addition to shortening the wait time for patients and automating call for appointments, the above-mentioned systems ensure that patients can reschedule their appointment which makes such systems effective in enforcing appointment no-shows and enhancing the compliance of patients. In addition, one should also note that the schedule is of crucial importance and technology can be of significant help here. These could include the use of mobile applications and online portals that could avail to the patients their schedule of the day or week, avail them real time data or information in regards to their appointments, and ease the process of communication with various healthcare providers. Besides, this not only improves the convenience of patients, but also facilitates patient self-management activities.

Moreover, reliance solely on technologies in their physician scheduling strategies and interventions also require the healthcare professionals to plan more strategically to include coordination of-efforts in addressing the problem. Therefore, from the analysis of the number of patients, understanding the time of the day or week when they are most numerous, as well as the use of proper algorithms for appointing patients efficiently, hospitals and clinics can deploy their resources in the best manner possible, and also ensure that the time patients have to wait is as small as possible. Besides, because OHCS works with teams comprising physicians, nurses, administrators, and IT specialists, it is possible to resolve any scheduling concerns as well as create new effective adaptations in cooperation with the needed team.

Phone and electronic devices and hence, it was crucial to have our Mobile Application which was deemed as imperative. From the mobile application, the patients can explore their appointments strictly from their own convenience as the power of getting a hold of their healthcare processes has been placed right in their palms. Apart from that, this revolutionary technique makes the process less complicated and at the same time enables the straightforward monitoring of the duration of the appointment. Also, it erects a channel of direct communication with the patient which is useful and efficient in the flow of interaction between the patient and clinician. These changes such as the use of this new web-based appointment and scheduling system and the use of the new mobile application can be regarded as a new dawn in the healthcare sector. Thanks to recently introduced solutions, the hospital has brought a reformation in patients' appointments and thus become much more effective. Patients have been provided with convenience, access and efficiency to flow through the entire system without any worry and clinicians have been provided with efficient means of handling appointments and ensuring the client gets the best of health care services. This work not only contributes to solving the existing problems but also helps to outline the further development of the healthcare system in its connection with progressive technologies to create the best conditions for both clients and healthcare providers [12].

### **C. Comprehensive Patient Data Management**

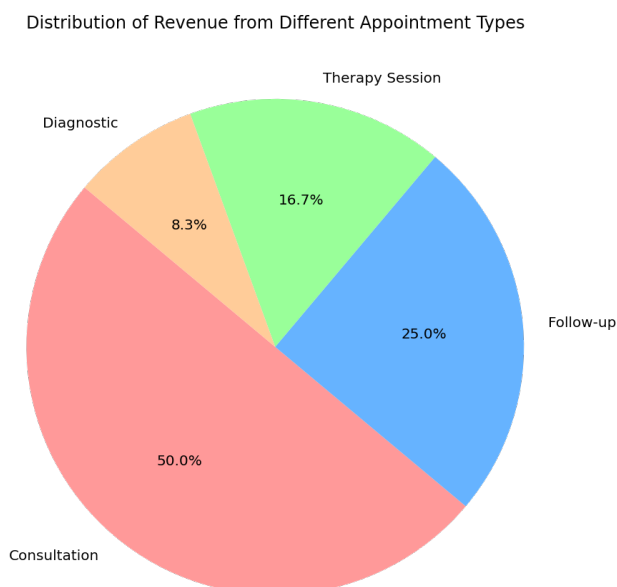
Maintaining and managing patient records in the medical field is a vital factor that should be given close attention in any organization. Owing to the large amount of data accumulated in such records, it is crucial to instantly retrieve and convey them to the appropriate personnel of the medical clinic.

Additionally, extra precaution should be that data relating to people's health is protected from persons who ought not to have access to such information. Among the fundamental technological tools necessary for the effective management of patients' records and patients' health enhancements, the Comprehensive Computerized Patient Record (CPR) system is used to address the challenge inherent in the processing of patient data in real time with little compromise on the quality of data compiled.

The CGCPR system is a new kind of CPR that may effectively be used in medical tele-consultation, remote treatment, and common care of the patient. This system combines the concept of web-based multimedia data acquisition with a medical data transmission and control network allowing the transfer of patient data through the WWW, and display of the data over the original network with the help of standard WWW browsers. Thus, by going to a physician, information from the database can be recalled, and improvement in the application of treatments through the use of the CGCPR system can be attained. For the purpose of storing the records of patients, a telemedicine database has been created separately. Being a client/server based design, this telemedicine database can be operated in a fully functional, configurable and scalable mode, along with DICOM and web standard compatibility. It focuses to archive and manage patient's health information that is gathered by multimedia approach and serves as a tele-consultation mechanism to deliver treatments over the internet. Both functionalities enable real-time multimedia remote consultation, as well as management of the patient's medical records within the telemedicine system. The practice of the web-based telemedicine system has been done and analyzed extensively at Xilin Hospital. The captured patients' medical record correlates well with the tele-consultation system by providing the best way to occupy the resources available in the system. The successful implementation of its framework may actually demonstrate the ability of the solution to transform current healthcare practices and improve patients' care results.

#### **D. Efficient Billing and Revenue Cycle Management**

Security and personal data protection became crucial in the growing digital environment. In view of this, the telemedicine system of choice employs the strictest protocols of privacy and data security. This makes it possible for the patient information to be highly secured and kept confidential during the communication and transactions that take place within the specific system. In addition, regarding the primary and secondary telemedicine specific research questions pertinent feasible obligatory reimbursement for telemedicine services, the following conclusions can be made. Telemedicine could therefore be integrated easily into the health practices of an organization by using efficient billing and insurance recovery procedures that will ensure sustainability of the program. The real-time data management of patients' information is integrated in the system due to its crucial role in improving the delivery of healthcare services. This makes it easy for modern day caregivers to retrieve and modify a patient's details on the go in a way that enhances the speed of caregiving. Furthermore, the system presents strategies for patient flow management to ensure out-patient currents are optimally arranged as well as physicians' appointments. Thus, as telemedicine systems contribute to increasing the delivery's effectiveness and reducing health care facilities' workload, their implementation can improve workflow in the health care sector.



**Fig. 4:** Distribution of Revenue from Different Appointment Types

Present research emphasizes that many opportunities of using telemedicine systems in changing the existing views of healthcare modalities exist. The development of such systems raises numerous advantages which include access, constant surveillance, privacy and security, how feasible for reimbursement, data organization, ways of patients' movement, and understanding the evolution of diseases. When the above mentioned operational steps have been taken into consideration and the possible measures have been incorporated into the process, telemedicine has the potentiality to revolutionise the healthcare delivery systems offering a new dawn of convenient, effective and patient centred care [15]. In the bigger topic of the economics of healthcare services as described in [16], billing is explained to be one of the vital intermediate activities. Health information technology is crucial to the achievement of the health care organization's operations objectives and affects every health care provider in some capacity. Due to the rapid advancement of telemedicine, the largest billing and revenue cycle opportunities present in the field of telemedicine are daily reimbursement issues, patient collections connected to telemedicine care and services, and the regulation and compliance issues.

With an increase in telemedicine services, the billing and reimbursement procedures along with patient collections mechanism and compliance requirements have become more complicated. This complexity has resulted in an increase in billing claims and has led to multiple denials due to insufficient or incorrect information. These irrational expenses have troubled telemedicine and telehealth services.

#### **E. Enhancing Telemedicine with Advanced Analytics and Reporting**

SAP mostly focuses on the development of areas such as predictive analytics for gathering and monitoring reasons, and big data, including data-based actions [6]. In health management, most of the growth comes from developing image data to easily develop an analytical and diagnostic preliminary reaction that enhances the plan for further imaging analysis. When a radiologist has his imaging findings and the subsequent surgical procedure to be evaluated, teleradiology breaks the geographical limits and helps, in real time, remote places to access skilled physicians or to have timely diagnostic services. Future telemedicine systems should include video service, immediate, trusted, cost-effective, and interoperable ready-to-use video apps. Providing remote access to health facilities may also promote centralized control. The broad objectives of SAP that are intended to be used for telemedicine are related



to improved process management, enhanced security, the large-scale management of patient data, and the system's ability to be accessible from remote locations. Often, enterprises assume that medical information is extensively secure, when, in data, there are numerous ways in which it could be exploited illegally [17]. Digital health consultants are sometimes called upon to regularly update and maintain data security, while providing support for using the technology. In this context, making security improvements throughout the platform is a need that can never be forgotten. Data security has to be the foundation, and a prerequisite to overall medical intelligence that comes with documentation and decision support, remote patient monitoring, and telemedicine systems. For various decision support, data mining within large datasets, predictive modeling encompasses an ensemble of methods like classification, clustering, regression, and so on.

#### **4. Contributions**

As the telemedicine market continues to thrive and expand, it is poised to play an increasingly pivotal role in shaping the future of healthcare, offering accessible, efficient, and patient-centric solutions in times of crisis and beyond. By leveraging the potential of telemedicine, healthcare providers can ensure the continuity of care, minimize the strain on healthcare systems, and ultimately improve patient outcomes on a global scale. Telemedicine has become an indispensable tool in almost half of healthcare facilities around the world, playing a pivotal role in reducing in-person contacts and effectively containing the rapid spread of the highly infectious pandemics virus. As the global reach of this unprecedented pandemic continues to surge, there has been an exponential surge in the demand for healthcare services, leading to a remarkable growth in the telemedicine market. This growth has been marked by substantial investments and widespread adoption across various sectors, including hospitals, clinics, and private practices.

In recent times, we have witnessed numerous instances where patients have sought the expertise of healthcare professionals for routine check-ups without physically visiting the doctor's office. Through the convenience of a simple phone call or video consultation, patients have been able to consult with their doctors and even receive prescriptions remotely. Gone are the days when individuals would hastily rush to hospitals upon experiencing symptoms of a common cold. The valuable lessons imparted by the pandemics crisis have instilled a sense of caution in people, urging them to take necessary precautions and seek medical advice from the safety and comfort of their own homes. The expansion of telemedicine not only ensures the continuity of essential healthcare services but also provides a sense of reassurance to patients, enabling them to navigate these challenging times with confidence. By utilizing telemedicine, individuals are able to access timely medical guidance, specialized care, and valuable support, all without leaving the safety of their homes. This transformative approach to healthcare has swiftly emerged as a crucial component in the global battle against the devastating impacts of pandemics, serving as a lifeline for patients who require ongoing medical attention. Furthermore, telemedicine has not only revolutionized the way medical assistance is sought during the pandemic, but it is also primed to shape the future of healthcare beyond the current crisis. Due to the continually evolving society's understanding of and compliance with telemedicine services, coupled with continued development in technology, there is a heightened ability for telemedicine to aid particularly during crises while providing patient-centric and efficient solutions. Telemedicine has great potential for further development and can give a new impulse to healthcare improvement, especially in the areas that are deprived of qualified specialists' attention.

## 5. Significance and Benefits

Telemedicine can improve the quality of healthcare delivery and increase service delivery in the following ways. It has been widely used and demonstrated to be very effective, especially in areas where the health care services are scarce. Hence, through consultations and recommendations through telemedicine, many patients struggling with acute and chronic diseases, particularly those who are in unsuitable circumstances, have been relieved. Due to inclusive approach and opportunity to continue the therapy omitting physical presence, telemedicine guarantees that the patient gets the needed medical attention after the initial examination. This continuity of care builds better patient outcomes and dramatically decreases the hardships of patients and caregivers alike. In addition, e-solutions have an essential function of organizing and monitoring preventive and rehabilitative treatments with the help of which healthcare practitioners can propose individual and complex approaches to management of a patient's condition without physical contact.

Two major areas, tele-behavioral health and tele-physiotherapy are the areas where the reality of telemedicine has been identified vividly. Thanks to the possibilities offered by digital technologies, modalities can provide help to different people and different groups of people struggling with acute or chronic issues in their lives. Whether the issue is mental health or physical, the presence of telemedicine ensures a convenient way of getting the required therapy and counseling [18].

However, after reviewing the factors this paper established that infection control measures should be given a higher priority to guarantee the safe delivery of telemedicine services. The type of consultation that should be adopted needs to be determined based on the status of patients and the available means before implementation. It guarantees that the approaches taken are efficient and procedure individually tailored to the patient, which, in result, enhances the general health outcomes and the success of a telemedicine project. Telemedicine has been receiving a lot of regard and appreciation on the idea that it may transform the delivery of healthcare services. It also eradicates geographical limitations and improves patient care in aspects that seem almost unimaginable before. Telemedicine has a great impact on the health sector since it helps in increasing access and decreasing costs.

Telemedicine has the greatest strength in its capacity to offer sustained client care. Thus, with the maintenance of remote follow-up treatment appointments, patients can be assigned with further treatment and consistent check-up. This means that their health needs are well catered for in all aspects and thus provide or contribute to better health status. Also, in the framework of preventive and rehabilitative care, teleconsultation is vital in the organization of the same. Thus, relying on the opportunities provided by e-solutions, representatives of the health sector can develop individual treatment programs and track patients' conditions with the help of telemedicine techniques. This makes it possible for a person to gain all round medical care regardless of the country or the disability he or she may be facing.

## 6. Conclusion

The main aim of this paper was to assess the use of SAP in telemedicine. The findings shows that among the many branches of telemedicine, tele-behavioral health and tele-physiotherapy are some of the areas where much boon has been anticipated. With the help of the Internet, people with the issues concerning their mental health or physical recovery can receive therapy and counseling from the comfort of their own homes. This removes the gaps in care and guarantees that clients can access the help they require as

and when they require it. Yet, when deploying the telemedicine services, specific infection control measures should be considered as the priority. With reference to the independent features reflecting the patients' clinical conditions and available resources, the right consultation mode can be selected by the healthcare providers. This action ensures that appropriate standards in care, safety, and efficiency are achieved and delivered to patients, which increases health outcomes and the success of telemedicine. In general, telemedicine is a major shift in the process of delivering medical services that presents a lot of opportunities for changing the status of receiving medical services. Telemedicine on the other hand is the use of telecommunications technology in the provision of healthcare services to patients. Such medical services are beneficial for patients who require a direct clinical meeting. Telemedicine software is relevant in the context of modernized healthcare industries in pandemics. It is also relevant to the long-term illness patient population. In emergencies, telemedicine can also be helpful. Telemedicine has flexibility to schedule patients in smaller time slots. Telemedicine avoids patients waiting or standing in queues. The telemedicine workflow consists of several stages. When any patient requests for consultation, the nurse notifies the doctor and schedules the time, slot, and location for the patient. Then the doctor chooses the communication methods from the available options (e.g. mobile call, video call, etc.) for a patient that signals a consultation is completed. Telemedicine system eases patient interactions with healthcare professionals and services which include tele consultation, tele-diagnosis, and teletherapy. Telemedicine's main limitation is internet connectivity but in urban areas, this is very rare.

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