



Health Technology

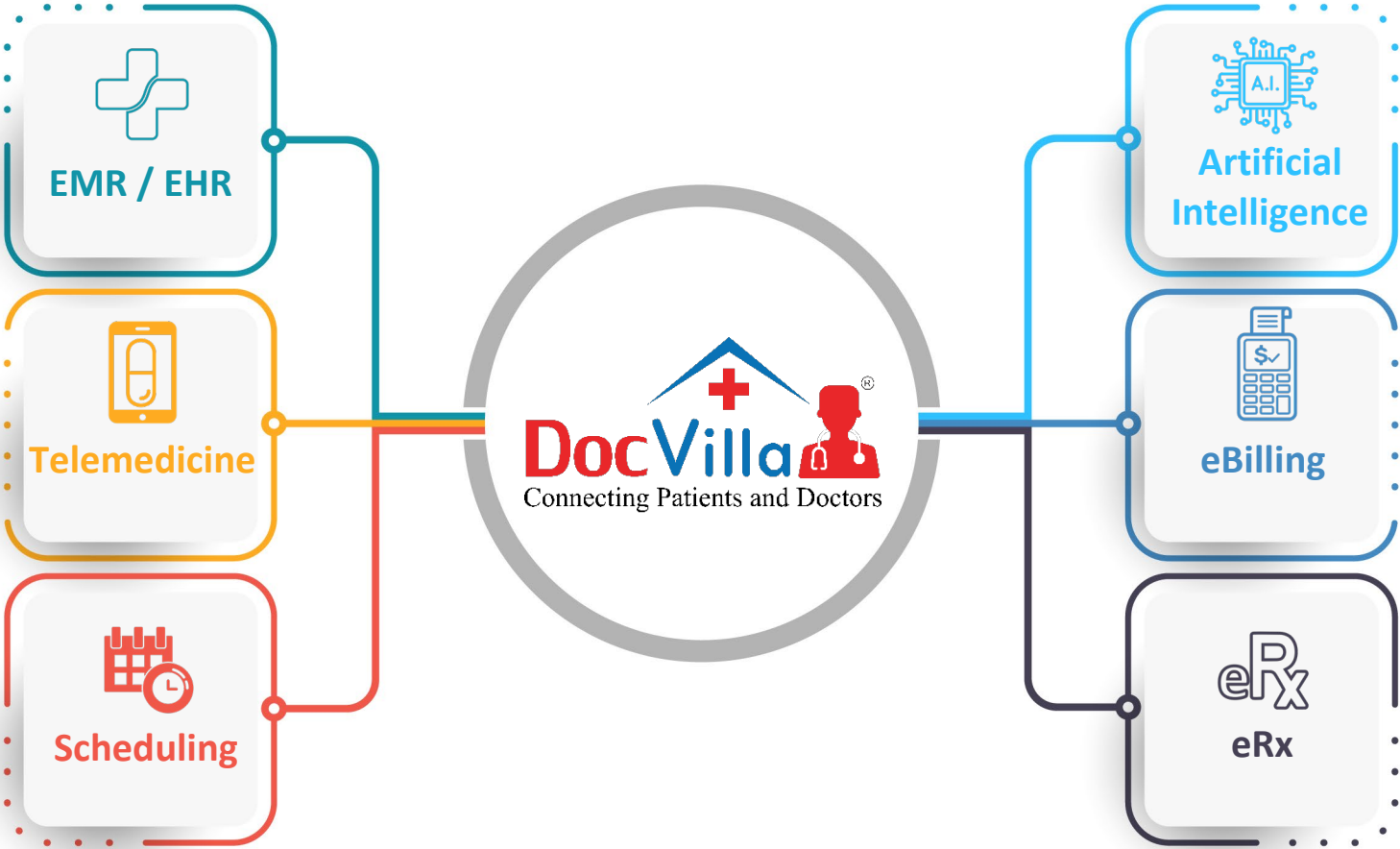
Simplifying Provider – Patient Interaction

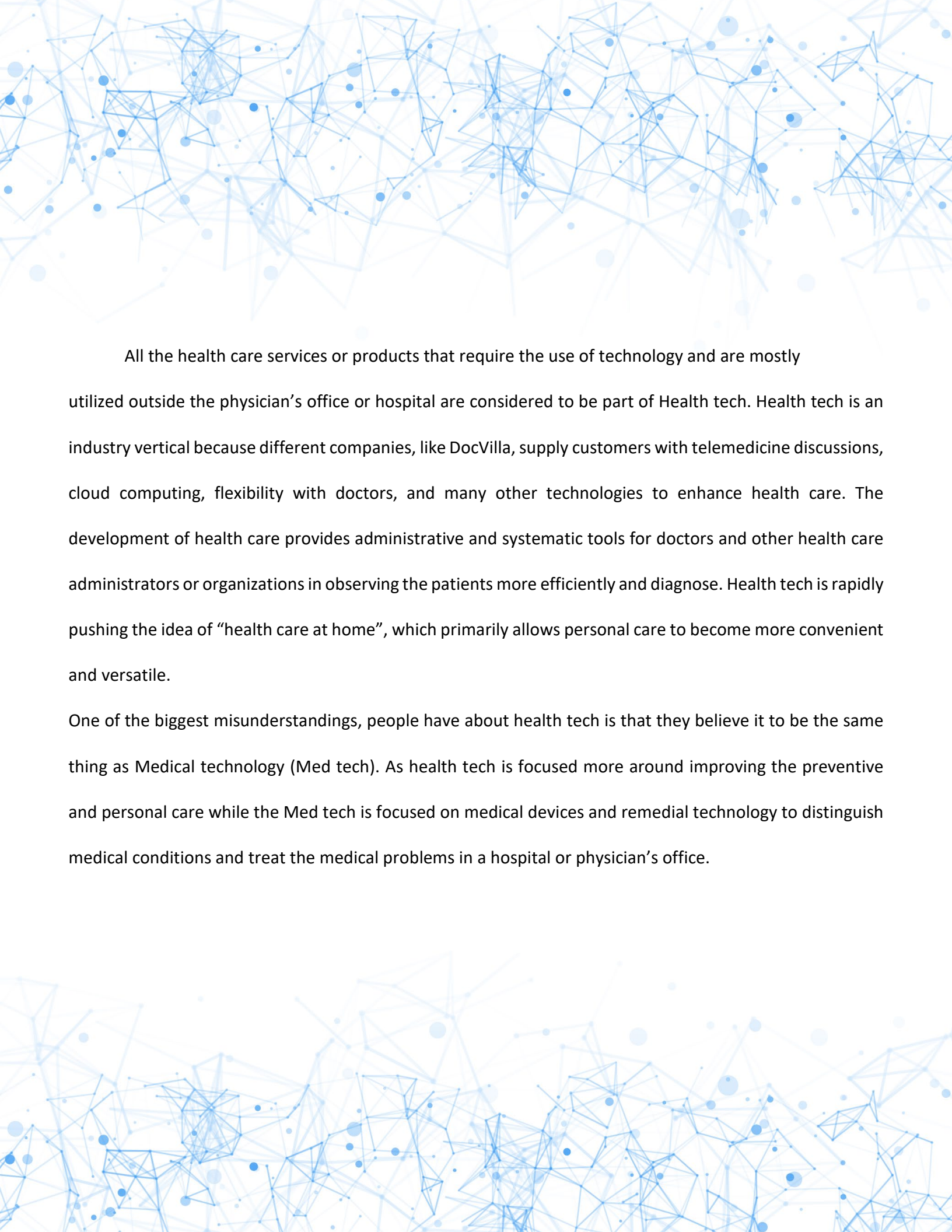


Healthcare technology is one of the fastest growing industries not only in this country but globally also. The term 'Health care' broadly covers the Health tech but it has some more components under its umbrella. The primary goal of Health tech is to merge the technology into Health care so as to deliver more convenient and efficient medical treatment to the patients. There is no doubt that Health tech can obviate the need of physically visiting a doctor's office but it is predominantly being used to provide care to the patients outside the office or hospital.

In 2018, the health care industry accounted for around 17.7% of the nation's Gross Domestic Product (GDP) as per the reports of Centers for Medicare & Medicaid Services. This shows that the health care system has a massive impact on the economy of the US and it is extremely important to keep this system up to date but unfortunately few components of the health care system are antiquated and vulnerable to any disturbance. Today, the biggest and most obvious example of disturbance is the Coronavirus (COVID-19) pandemic that our country and the whole world is suffering from. The COVID-19 pandemic has forced many doctors to shut down their offices across the country. As a result thereof, the patients could not meet the doctor of their choice and had to go directly to a hospital for any concerns or emergencies. This has caused a major disruption in the health care since the hospitals did not have patient's medical information.

DocVilla Health Tech Services





All the health care services or products that require the use of technology and are mostly utilized outside the physician's office or hospital are considered to be part of Health tech. Health tech is an industry vertical because different companies, like DocVilla, supply customers with telemedicine discussions, cloud computing, flexibility with doctors, and many other technologies to enhance health care. The development of health care provides administrative and systematic tools for doctors and other health care administrators or organizations in observing the patients more efficiently and diagnose. Health tech is rapidly pushing the idea of "health care at home", which primarily allows personal care to become more convenient and versatile.

One of the biggest misunderstandings, people have about health tech is that they believe it to be the same thing as Medical technology (Med tech). As health tech is focused more around improving the preventive and personal care while the Med tech is focused on medical devices and remedial technology to distinguish medical conditions and treat the medical problems in a hospital or physician's office.

EMR / EHR



Electronic Medical Records (EMR) and Electronic Health Records (EHR) are two very similar terms but have different uses and advantage. EMR and EHR are similar in the sense that they both hold patient's confidential information and medical history on a cloud-based server. The major distinction between EMR and EHR is that an EHR comprises of a patient's health records from different physicians which provides a more aggregated outlook of the patient's health. On the other hand, an EMR contains medical records that are only available to a specific doctor. If a patient decides to go to a different doctor, that they normally don't do, then their EMR will not be available to the new doctor. If a new doctor requests the information that is on the patient's EMR, the patient will have to ask their previous doctor to print out the information as a paper copy.



The development of an EMR in a physician's office not only benefits the doctor but is also good for the patients. Some advantages of an EMR from the physician's side include; your physician is able to conveniently identify when a patient needs a regular checkup or a vaccine, monitor patient data to track trends or tendencies over a period of time, advancement in office management and care since fewer medical practice errors would be made, and many other things that cannot be done on paper. Some advantages of an EMR from the patient's side include; more efficient care and faster responses from your physician, hardly any mistakes in the medical records since it is electronic, and improved treatment of the illness or disease.



During this COVID-19 pandemic many state governments ordered physicians to shut down their offices and as a result the patients had to go to the hospital directly for any concerns. This caused a major dilemma for doctors' who did not have an EMR system implemented and had all patient information on paper. When the patients wanted medical records from their physician, they could not obtain it since their offices were closed. This is the scenario where an EMR system would be very crucial and is must for the physicians to have.

Electronic Health Records (EHR) basically does all the functions of an EMR system and also many more. An EHR system consists of records of the overall health of a patient and not just the ordinary information that can be found at the doctor's office. It also contains information from different doctor's, laboratories, or specialists that you have been to, instead of just one doctor. Records of the overall health of the patient is provided in an EHR because it is meant to be shared to other physicians' or specialists' if needed.



Sharing of only typical clinical data will not be enough for the healthcare providers since that information might not be sufficient to arrive at a conclusion. EHRs basically go along with the patient to the hospital, clinician, or even a nursing home. EHRs prove that healthcare in this country is a team effort and sharing of information in a safe way makes it more useful and important. At the end of the day, during illness if a patient's information and records cannot be shared from person to person, and different parties cannot communicate with each other, the value of the healthcare system will diminish.

DocVilla provides services of both EMR and EHR and is the only EHR system that also provides telemedicine features. DocVilla offers a patient portal which gives the patients an access to their medical records at all times. Physicians or any other healthcare advisor can request data and records from other advisors who have had the previous information of the patients. Besides it, the patients can also choose as to who they want to share their information and directly send it through the system.

Telemedicine



Telemedicine allows physicians and other healthcare experts to advise, assist, and cure the patients from outside the doctor's office. This is done through the use of electronic communication and software. Telemedicine can be used for a vast number of things like assisting to cure a serious condition, follow-up visits, consultation with a specialist, and medication management.

DocVilla offers a HIPAA (Health Insurance Portability and Accountability Act) compliant video conferencing software for healthcare specialists and patients to communicate each other. DocVilla platform provides not only the video consultations but also a safe messaging feature between the two parties, whereas the most of our competitors provide only video consultations. Medical experts and the medical community have opined that the use of telemedicine is a step in the right direction for the health care/health tech system.



DocVilla is one and the only Health tech platforms that allows the patients to give access to a healthcare provider with a single click, and then also remove the access of their information very easily. DocVilla has already filed a patent application for this functionality. Patient's medical/health records go from the patient application to the DocVilla cloud very safely through Secure Sockets Layer (SSL).

Not only does DocVilla offer video calling between a doctor and patient, but it also allows doctors to add a third-party consultant if needed. For example, if a doctor is unsure about a specific question the patient has or does not know the most efficient cure to the problem, the doctor can add a specialist to the video chat to assist. If the third-party user does not have a DocVilla account, he/she can still join through a simple SMS sent by the doctor. This not only helps the doctor to figure out a solution with a Specialist but makes it extremely convenient for the Specialist also to help out.



Another great feature that DocVilla provides is the ability of doctors to record the meeting with their patient's permission, and safely saved as per HIPAA guidelines.

This is an extremely useful feature since a doctor can go back and review something the patient had said in the meeting, in case they forgot at a later date. DocVilla also provides doctors the option to share their screen during a video conference to their patient. This will allow the doctor to review an important document, MRI, X-Ray, etc. with the patient at the same time. This feature gets rid of the hassle of faxing a document to share it. Some people may ask whether the telemedicine is safe to use and cure your problem and the answer to that is 'yes', if used in appropriate conditions. Telemedicine is not designed to treat the patients in all conditions a patient could have, but non-emergency conditions can definitely be assisted with.

Overall, some advantages of telemedicine for the patient include no travel expense, not exposed to other ill patients at the physician's office, full privacy at your own house, and an appointment can easily fit into someone's busy schedule.





Scheduling

It is mistaken very often that physician's only worry about caring for their patients as that is their main goal. But the private practitioners also have to worry about all the factors that go into running a business. DocVilla has made it very easy for physicians to manage their day and many other things by creating a Medical Practice Management software. Through this system, a number of things can be done like make a timeline for their entire day, manage billings, scheduling, send email reminders, organize patient data, and so many other clerical tasks.

DocVilla allows physicians and other healthcare specialists, a flexibility to provide additional services besides the standard in-person appointments and telemedicine features. This feature by DocVilla is called Service-based Scheduling and Fees. For example, for services like Sutures and Wound care or Botox treatment, the effort, time and cost that is required varies. That being said, doctors would be given the power to charge different rates and scheduling times for extra services. This gets rid of the problem with charging a constant fee from the patient for different services and rather puts more value on different types of services as per the efforts required to put in.

Electronic Prescriptions



Electronic prescriptions are the future of all prescriptions in the healthcare industry as it comes with many benefits. The goal of electronic prescriptions is to simply allow the prescriber to deliver a prescription electronically to a pharmacy server. This fast-growing technology is slowly getting rid of all physical handwritten prescriptions which have many disadvantages. According to the Institute for Safe Medicine Practices, about 150 million phone calls are made each year from pharmacists to healthcare specialists because of indecipherable handwritten prescriptions. On the contrary, electronic prescriptions delivered straight to a pharmacist comes with little to no errors since the pharmacist would not have to go through the trouble of potentially not being able to read what it states, as this is a frequent issue. This would also save many people from accidentally purchasing the wrong medicine. Doctors do not have to spend time explaining/clarifying a prescription to a patient or making follow-up calls since the prescription is sent directly to the pharmacist with all the details need. The overall workflow of both a physician's office and a pharmacy is significantly increased by electronic prescriptions.

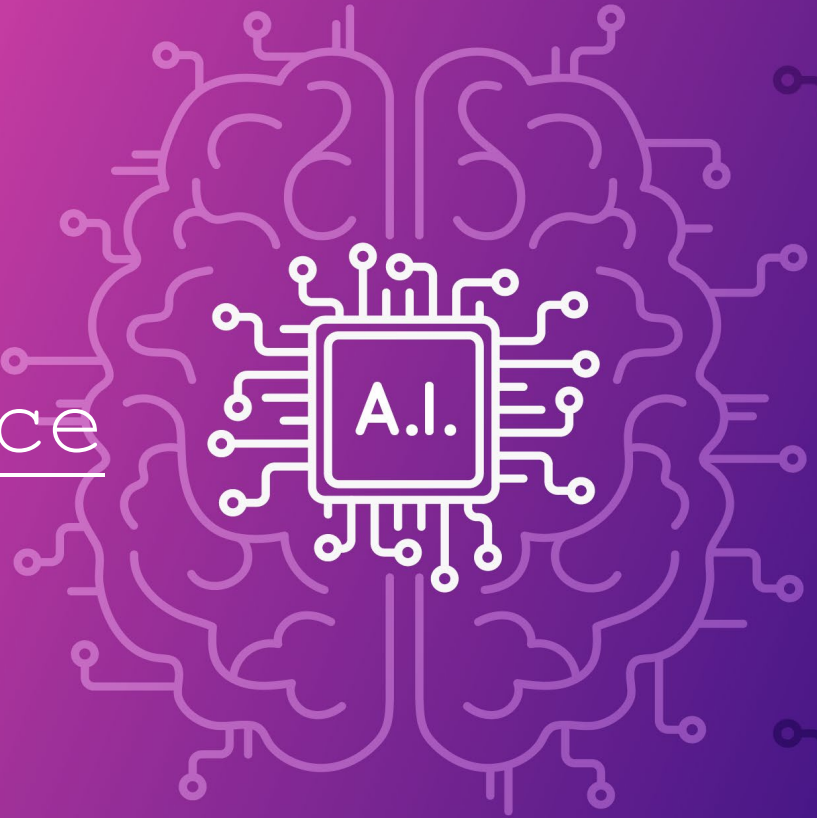
DocVilla offers electronic prescriptions using Surescripts network. Electronic prescription transactions like NewRx, RefillRequest, RxChange, and CancelRx are all supported by DocVilla.



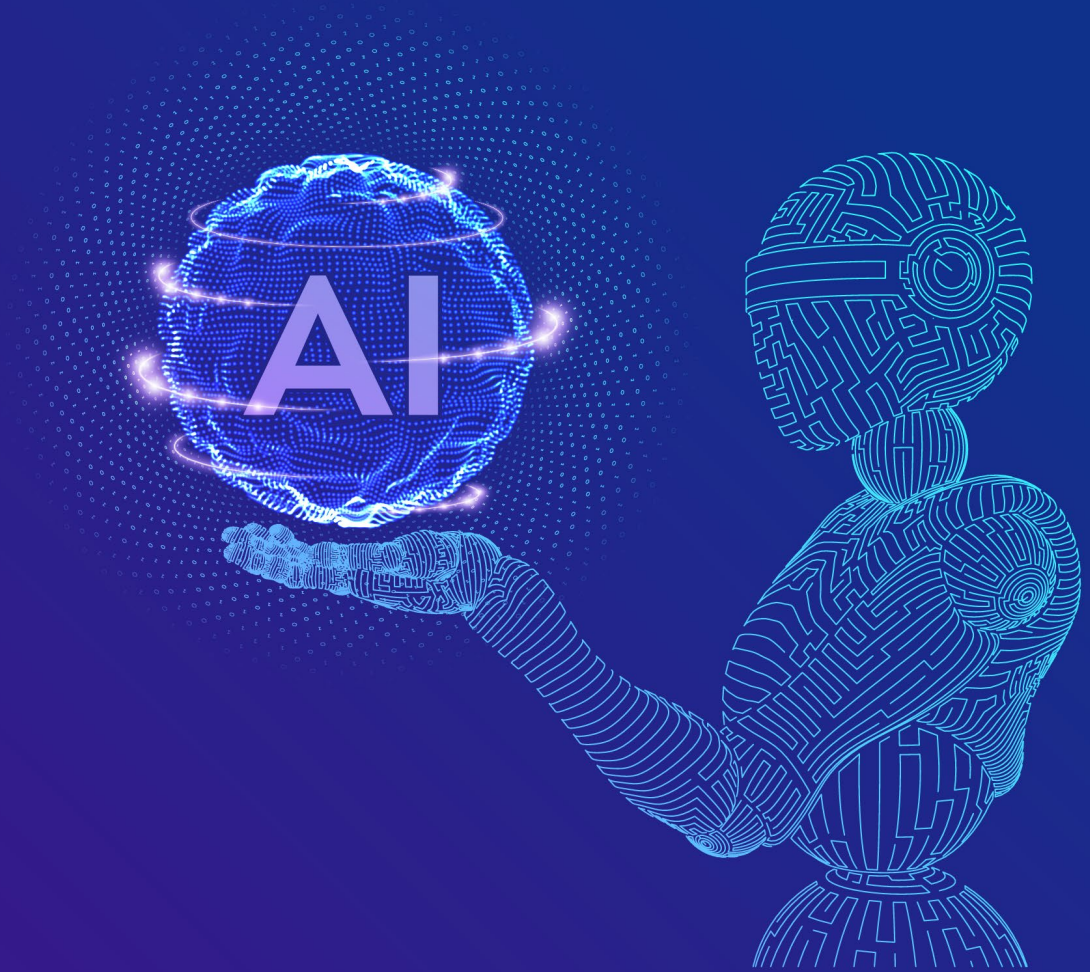
Billing

One of the biggest benefits of DocVilla is that it provides automated cashless billing for the patient and the provider. If the patient has medical insurance, the copay will be charged from the patient and the remaining balance will be charged to the insurance provider. If the patient does not provide any medical insurance, the fees of the meeting that the patient and doctor agreed on will be directly billed to the credit card provided by the patient. DocVilla is compatible with all major credit card companies like Visa, Master, American Express, and Discover, making it much easier for the patient to register their credit card with the system. Credit card information is only asked for before making an appointment with a provider, and only charged once the meeting is concluded. Many competitors of DocVilla ask for a significant percent of your income as fees, but DocVilla makes sure that all money in the system is transferred only between the healthcare specialists and the patients, and not kept for the platform. This helps us significantly boost our customer loyalty and experience.

Artificial Intelligence



In the coming years, use of Artificial intelligence could change the entire healthcare system. The main idea of artificial intelligence is to use previous medical history, technology and other data to cure a problem. Today the doctors and hospitals study the previous treatment procedures of patients and their outcomes to see if that can be helpful to come up with a line of action for treating the current patient. Artificial intelligence is based off of algorithms and software for health specialists to analyze trends of data for the current patient.



Many algorithms are working beyond health specialists in finding and curing different problems like tumors which then helps the researchers in their studies and discoveries. The technology used could alter the entire procedure of patient care, pharmaceuticals as well as the administration process. DocVilla is not only using the artificial intelligence for patient care but also for cybersecurity and further working on models to predict patient prognosis based on various medical data.