



## Telepharmacy -A Review

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### Abstract

It is fascinating to communicate that, the word Pharmacy is frequently animated up with alternative word Tele-pharmacy. In India, a pharmacist should be registered with state pharmacy council beforehand and then one can start working and inevitably one benefits enumerated with pharmacy council of India when one is enumerated with all state pharmacy council, thus one can practice all over India. Telepharmacy is the use of telecommunications technology to provide pharmacist services to distant populations. Telepharmacy services may include drug review/monitoring, provision of drug information, medication dispensing, verification of oral and sterile compounding, patient assessment, patient counseling and medication therapy management. To advance the circumstances is that a regulation must be endorsed where succeeding reflections must be retained. The implementation of telepharmacy systems is rapidly expanding due to the increasing affordability of videoconferencing technology and the increasing capability of the pharmacist to securely access electronic patient health records and perform traditional pharmacy practice activities remotely via the Internet. The number of scientifically-rigorous evaluations of telepharmacy has not kept pace with the rate of telepharmacy adoption. There must have been a certificate scheme according to the area of practice. Tele-pharmacy will be a great boon for a country like India with very huge population, where people from remote areas cannot reach up to a retail pharmacy, can order and buy drugs through online pharmacy.

**Keywords:** *Tele-pharmacy, PCI, E-pharmacy.*

### Introduction

The delivery of pharmaceutical care via telecommunications to the patients in locations, where they may not have direct contact with a pharmacist is termed as Telepharmacy. Through this way patients can receive their medicines and other pharmaceutical care items in the comfort of where they can get the services easy. Some of the services given are patient counseling, drug therapy monitoring, and refill authorization for the prescribed drugs, monitoring or formulary compliance by the means of videoconferencing or teleconferencing and prior authorization of prescribed drugs.

Other services are taking medicines to remote places and also labeling the systems. These services can be given at your retail pharmacy places or even through the nursing homes, hospitals, and other medical facilities.

Telemedicine is oftentimes used interchangeably with telehealth. Telemedicine, however, more specifically describes the delivery of clinical services or clinical care to patients by a physician or other healthcare provider, whereas telehealth broadly describes all health-related uses of technology including clinical care, health education to professionals and patients, public health, research and administration[1].

Remote dispensing of medications by automated packaging and labeling systems can also be thought of as an instance of telepharmacy. It is an instance of the wider phenomenon of telemedicine, as implemented in the field of pharmacy. Telepharmacy services can be delivered at retail pharmacy sites or through hospitals, nursing homes, or other medical care facilities.

### **Inpatient (Remote Order-Entry Review)**

Inpatient telepharmacy refers to a pharmacist at a remote location performing remote order-entry services for an inpatient pharmacy at a hospital. The remote pharmacist reviews medication orders before the hospital staff administers the drugs to the patient.

Uses: Hospitals and health systems benefit from inpatient telepharmacy as it allows for real-time medication order review and verification. Remote order-entry review in a health system serves as an extension of the in-house pharmacy. With inpatient telepharmacy, remote pharmacists are able to provide 24/7 coverage or fill-in during peak hours to help supplement and strengthen the inpatient pharmacy [3].

### **Remote Dispensing (Retail/Outpatient/Discharge)**

A remote-dispensing site, or retail community telepharmacy, is a licensed brick-and-mortar pharmacy staffed by a certified pharmacy technician (or two, depending on volume). A pharmacist supervises the technician, reviews prescriptions and performs his or her duties from a remote location via technology. Imagine a traditional pharmacy, except the pharmacist is located off-site.

Uses: It is used in retail community pharmacy and outpatient/discharge pharmacy. Telepharmacy gives patients convenient access to a pharmacist and prescription medication no matter geographic location. Remote dispensing allows healthcare organizations to open retail telepharmacy sites in areas where a traditional pharmacy would not be feasible by sharing the cost of a pharmacist across multiple stores[4].

### **IV Admixture**

IV admixture is defined as, “the preparation of pharmaceutical product which requires the measured addition of a medication to a 50 mL or greater bag or bottle of intravenous fluid.” In other terms, IV admixture is the mixing of IV solution administered to patients in a hospital setting. Patients at the remote clinic were surveyed regarding their satisfaction with the telepharmacy services.

Overall, patients were very happy with the service.

Uses: Hospital pharmacies can save time and money by implementing telepharmacy in the IV-admixture cleanroom. If a pharmacist can review the IV admixture remotely, they save the time needed to suit up and enter the cleanroom to review the solution. Freeing up pharmacists' time allows them to focus on clinical activities and other revenue-generating tasks. As an added bonus, implementing an image-based telepharmacy workflow (such as ours) in a cleanroom allows you to document each step of the process and minimize mistakes [5].

### **Remote Counseling**

Remote-patient counseling equates to pharmacists providing patient counseling via a live-and-interactive video session, or by some means through telecommunications.

Uses: Remote-patient counseling allows pharmacists to consult and provide a variety of pharmacy-care services to patients via secure, live-video calls. Beyond being beneficial to retail independents, community, clinic and hospital-based pharmacies, remote counseling also provides opportunities for specialty counseling (diabetics/HIV/AIDS), discharge counseling and various clinical interactions with pharmacists [6].

### **Advantages & Disadvantages [7]**

One major benefit is that many areas especially the remote ones that have no access to pharmaceutical care or pharmacist will enjoy the services due to the introduction of these services. Telepharmacy is one way that many people living in remote areas will enjoy especially if they are unable to get basic experts in the pharmacy care thus reducing the cost of traveling to other places for the same services. Patients are also counseled, and drug administering is monitored from time to time thus ensuring the medicines are taking place. Any facility near the point of services delivery will benefit by getting other pharmacists thus minimizing the cost of hiring full-time employee.

Due to the demand of delivering the services, sometimes it may be hard to get someone qualified to transmit the needed information thoroughly. This prompt to an error made when giving the services to the locals since

they will only get someone with less knowledge on the job.

Many patients will not receive the required information thus hindering their understanding more on the health related issues. This earliest form of telepharmacy remains in wide use today, with pharmacists using the telephone to counsel patients about their medications or answer drug information questions for prescribers and other health professionals.

Such interactions, however, usually occur when the pharmacist and other party are both located in the same community. For the purpose of this article, "telepharmacy" will be restricted to research involving communications technologies (including telephone, telefacsimile and videoconferencing) employed in pharmacy practice over distances that would make in-person interactions with the pharmacist impractical.

### Implementation [8]

To implement these ideas, it will depend on the economic situation and geographical laws and the regulations needed in that location. In some countries like Australia, United States, Canada, Belgium, England, Cuba, Guam, Germany, Japan, Italy, Venezuela, Spain and Bahrain started using telepharmacy means as an important mode

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for dispensing drugs to the patients. Some of the medicines given are analgesics, antibiotics, and the gastrointestinal medications. It helps the patients to receive the medication from their remote areas thus saving some good money.

With the improvement in Information technology, Telepharmacy has developed a lot in India. People has started buying their drugs through e-pharma. Many online pharma companies such as 1mg, Pharm easy, Health Kart, Medlife has started their services in India. Tele-pharmacy is still under progress due to the main disadvantage of mis-usage of drugs. The Government of India is still in making legal implications regarding e-pharma.

### Conclusion

Telepharmacy will a great boon for a country like India with very high implantation. But, there must be proper implementation of rules that govern the dispensing of certain habitual drugs through e-pharma.

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