

Teledentistry: An Overview

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ABSTRACT

Teledentistry can be defined as the remote provision of dental care, advice, or treatment through the medium of information technology, rather than through direct personal contact with the patient involved. Within the dental practice, it is used extensively in disciplines such as preventive dentistry, orthodontics, endodontics, oral surgery dental periodontal conditions, and detection of early dental caries patient education, oral medicine and diagnosis. Some of the key modes and methods used today are electronic health records, electronic referral systems digitizing images, teleconsultations, and telediagnosis. It is very effective is to bring about efficiency provide access to underserved populations, improve quality of care and reduce of oral disease burden.

Key words: Dentistry, health education, health information technology, teledentistry, telehealth

INTRODUCTION

The term teledentistry was first used in 1997. It can be defined as the remote provision of dental care, advice, or treatment through the medium of information technology rather than through direct personal contact with any patient involved.

TYPES

- Real-time consultation – transfers the information immediately
- Store and forward – allows data to be stored in a local database to be forwarded as needed.^[1,2]

NEED FOR TELEDENTISTRY

People living in the rural or underserved areas are among the most in need of oral health care in their communities. Many rural communities lack the clinical settings resource and cost-intensive. A dental care professional can digitalize and electronically transmit videos, drawings diagrams, photographs, and X-rays. Then, the information is prepared for transmission data which are transmitted to distant

sites. Requirement includes improvement in diagnostic service communication with dental laboratories and in the communication with insurance industry.^[3,4]

BENEFITS AND HIGHLIGHTS

It can provide an easier, cheaper, and less intimidating way to contact with dentistry. It is also used to assist the general dentist with specialty work and improves the service to underserved populations such as in rural or less developed areas. The highlight of teledentistry includes it improves access to care and delivery of health care, lower its cost, referral for the specialized care, continuing education, dentist-laboratory communications, and telemonitoring.^[5]

SERVICES AND MECHANISMS

Specialist referral services, professional education, patient consultation, consumer medical health information, and remote patient monitoring are some of the services provided by the teledentistry delivery. Delivery mechanisms are networked program hospitals and clinics and community health centers in rural and the suburban area by the use of dedicated high-speed line the internet. Then, the point-point

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connection using private networks used by hospitals and clinics that deliver services directly or contact out specialty services to independent providers at ambulatory care sites. Its care to the home services involves connecting primary care provider, specialist, and home health nurses with patients using single-line phone video systems for interactive clinical consultations. Home to monitor center is used for patient monitoring home care and related services that provide care to the patient in the home using normal phone lines and internet. Web-based e-health patient service site provides direct consumer outreach and services over the internet and telemedicine; these include sites that provide direct patient.^[4,6]

TELEDENTAL EQUIPMENT

Equipment used the field of teledentistry includes an extraoral digital camera, intraoral digital camera video conferencing system, digital radiographic system, portable dental radiographic system, laser, and fluorescence caries detection dye and computer.^[7-9]

FUTURE PROSPECTS

The advances in telecommunication have permitted to dental care to promise many changes during the next few years. There are various issues which require resolution for the success of teledentistry The issues include jurisdiction, inter-state license, and malpractice as well as technological, security and other ethical aspects.^[4,7,10]

CONCLUSION

At present, teledentistry has not yet become a fundamental part of healthcare but in future, it will be just another way

to access oral health care. Teledentistry provides new opportunities for health education by providing primary care professionals with easy access to efficient consultation and by helping in conducting postgraduate education and continuing dental education programs.

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