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Kayla T. Khau Virginia Commonwealth University

Hannah H. Nguyen Virginia Commonwealth University

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Teledentistry: An Innovative Workforce Model for Dental Hygienists Khau, Kayla¹; Nguyen, Hannah, BS¹ ¹Dental Hygiene Program, Department of General Practice, Virginia Commonwealth University

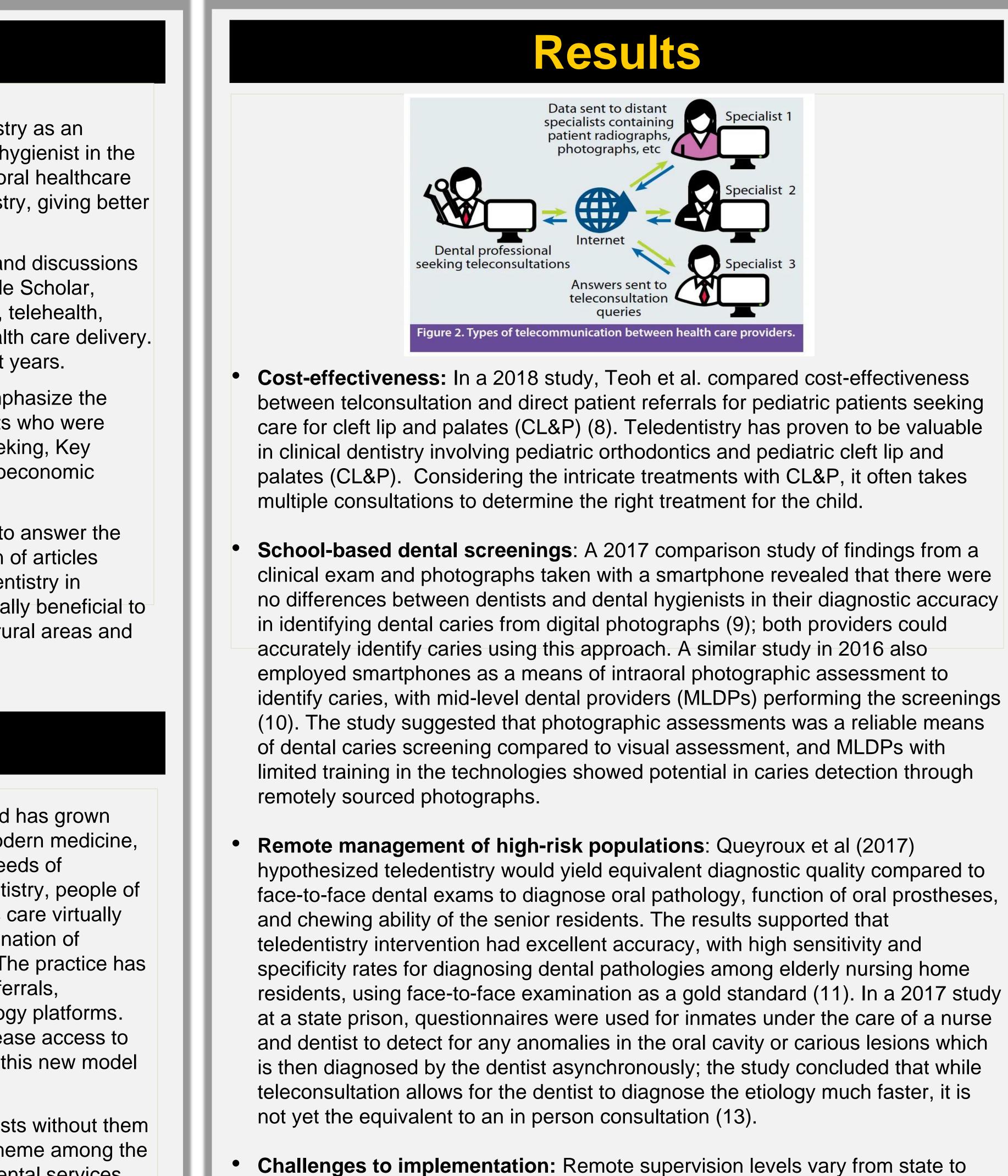
Abstract

- **Introduction:** This review of literature seeks to explore teledentistry as an alternative dental hygiene workforce model that places a dental hygienist in the role of the mid-level practitioner as part of a digitally-connected oral healthcare team. It will also emphasize the innovative methods of teledentistry, giving better health care delivery to diverse populations.
- **Methods:** The review of the literature analyzed the conclusions and discussions of primary and secondary scholarly articles from PubMed, Google Scholar, Embase, and CINAHL. Specific key terms included teledentistry, telehealth, teleconsultation, dental hygiene, dentistry, workforce model, health care delivery. Articles included in this review were published within the five last years.
- **Results:** Multiple scholarly articles were compiled together to emphasize the importance of technology-centered dental health care for patients who were unable to travel long distances to retrieve the care they were seeking, Key limitations the research often indicated include geographic, socioeconomic barriers or distance.
- **Conclusion:** The teledentistry-assisted model presents one way to answer the call to expand overall access to oral healthcare. The comparison of articles supported the efficiency and cost-effectiveness method of teledentistry in comparison to face to face consultations. Teledentistry is especially beneficial to addressing the access to care issue, particularly populations in rural areas and even penitentiary institutions.

Introduction

Telehealth has been an emerging practice in the medical world and has grown exponentially in all sectors of healthcare. Despite the growth of modern medicine, significant inequalities and disparities still exist in the oral health needs of Americans. With the incorporation of teledentistry into modern dentistry, people of different socioeconomic levels now have the opportunity to access care virtually with in-person consultations. Teledentistry is a collaborative combination of telecommunications technology, Internet, and dental practice (1). The practice has slowly evolved to be used for patient screenings, consultations, referrals, emergency education, and patient education from various technology platforms. Dental hygienists, who have the education and experience to increase access to care to underserved populations, will be key leaders to implement this new model of dentistry (2).

Mobile dentistry allows for faster real time examinations from dentists without them having to be present. After reviewing various articles, a common theme among the populations who benefited most are those who seek specialized dental services, assisted living facilities, individuals who live in rural areas, and even penitentiary institutions.



• Challenges to implementation: Remote supervision levels vary from state to state, which affects the services performed by MLDPs using teledentistry in rural and urban settings. There are also concerns with the traditional system of stateby-state licensing because there is no law to clarify the liability of the teleprovider. Ethically, patients must be made aware that their medical and dental information will be conveyed electronically. This presents the possibility that the information may still be intercepted, despite the security efforts of HIPAA (15).





Discussion

- treatment.

Conclusion

- traditional operatory.
- patients who cannot travel to see a specialist.

- healthcare delivery.

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• All forms of teledentistry have great potential to address oral health needs, particularly among underserved populations and in rural settings.

It can identify high-risk groups, expedite early detection of oral pathology, and provide a treatment pathway for those who require urgent intervention.

It has intentions for improving quality patient care by facilitating the delivery of timely information to dentists for better decision making, effectively triage patients, and reduces inappropriate referrals, thus reducing unnecessary waiting lists for

It also has implications for providing consultation and guidance to local dental practitioners, thereby improving access to care and expanding the capacity of the dental workforce in areas that are too isolated to attract dentists.

The substantial amount of scientific literature displays a consistent trend supporting the efficacy and effectiveness of teledentistry as an alternative for dental hygienists and other oral health professionals to practice outside of the

It has most beneficial applications for populations who live in rural areas and for

• Telemedicine enhances the scope of practice for dental hygienists who choose to work in underserved areas without a dentist in close proximity.

Further research in this area including stronger studies examining clinical outcomes, and health care utilization and costs in greater depth are essential for making long-term evidence-based policy decisions on teledentistry.

While the use of telehealth technologies has been considered complementary in oral healthcare, the trend will inevitably become an integral role in evolving

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