



Investigating the Application of Digital Dentistry in Modern Dental Practises

Julian Conejo*

Department of Preventive and Restorative Sciences, University of Pennsylvania School of Dental Medicine, Philadelphia, United States of America

*Corresponding Author: Julian Conejo, Department of Preventive and Restorative Sciences, University of Pennsylvania School of Dental Medicine, Philadelphia, United States of America; E-mail: julianc@upenn.edu

Received date: 29 May, 2023, Manuscript No. DHCR-23-104185;

Editor assigned date: 31 May, 2023, PreQC No. DHCR-23-104185 (PQ);

Reviewed date: 14 June, 2023, QC No. DHCR-23-104185;

Revised date: 21 June, 2023, Manuscript No. DHCR-23-104185 (R);

Published date: 28 June, 2023, DOI: 10.4172/2470-0886.1000162

Description

In the rapidly evolving landscape of modern dentistry, digital technology has revolutionized the way dental practices operate and patients receive care. Digital dentistry encompasses a wide range of technologies and techniques that enhance diagnosis, treatment planning, and the overall patient experience. From digital imaging to computer-aided design and manufacturing, digital dentistry has become an integral part of modern dental practices.

Enhanced diagnosis and treatment planning

Digital dentistry offers dentists advanced tools for accurate diagnosis and precise treatment planning. Digital imaging techniques, such as Cone Beam Computed Tomography (CBCT) and intraoral scanners, provide detailed 3D images of the teeth, jawbone, and surrounding structures. These images enable dentists to visualize the patient's oral anatomy more accurately, leading to more accurate diagnoses and improved treatment outcomes.

Efficient workflow and time savings

Digital dentistry streamlines the dental workflow, saving valuable time for both dentists and patients. Intraoral scanners eliminate the need for traditional impressions, allowing for a more comfortable and efficient process. Digital impressions are instantly available for review, eliminating the need for physical models and reducing turnaround times for restorations, such as crowns and bridges. Computer-Aided Design and Computer-Aided Manufacturing (CAD/CAM) systems enable same-day fabrication of restorations, eliminating the need for multiple appointments and temporary restorations.

Precision and accuracy

Digital dentistry enables precise and accurate dental restorations. CAD/CAM technology allows dentists to digitally design restorations,

such as crowns, veneers, and inlays, with great precision. Computer-guided implant placement ensures optimal positioning and predictable outcomes. The use of digital tools minimizes human error and leads to more consistent and precise results, ultimately improving the longevity and fit of dental restorations.

Improved patient communication

Digital dentistry enhances patient communication and involvement in their treatment journey. With digital imaging systems, dentists can visually explain dental conditions and treatment options to patients, improving their understanding and enabling them to make informed decisions. Virtual treatment simulations and smile design software allow patients to visualize the potential outcomes of various treatment options, enhancing their confidence in the proposed treatment plan.

Enhanced aesthetics and personalized restorations

Digital dentistry enables highly aesthetic and personalized dental restorations. Through digital imaging and smile design software, dentists can design restorations that match the patient's natural dentition and facial features. Digital tools allow for precise color matching and customization, ensuring a seamless integration of restorations with the patient's smile.

Collaboration and interdisciplinary care

Digital dentistry promotes collaboration and interdisciplinary care among dental professionals. Digital records and imaging can be easily shared between specialists, general dentists, and dental laboratories, facilitating efficient and coordinated treatment planning. This collaborative approach allows for comprehensive and integrated care, resulting in optimal outcomes for patients.

Continued advancements

Digital dentistry is an ever-evolving field, with ongoing advancements and innovations. New technologies, such as 3D printing, digital shade matching, and artificial intelligence, are continuously being integrated into dental practices, further enhancing the capabilities of digital dentistry. These advancements hold great potential for improving diagnostic accuracy, treatment efficiency, and patient outcomes in the future.

Conclusion

Digital dentistry has undoubtedly transformed modern dental practices, enhancing diagnosis, treatment planning, efficiency, and patient satisfaction. Dentists who embrace digital technologies can provide more accurate, personalized, and efficient care to their patients. As digital dentistry continues to evolve, it will play an increasingly vital role in shaping the future of dental healthcare, ultimately leading to improved oral health outcomes for patients worldwide.

Citation: Conejo J (2023) Investigating the Application of Digital Dentistry in Modern Dental Practises. *Dent Health Curr Res* 9:3.