



Striving For Perfection & Achieving Excellence

Incisal Edge News letter

Vol. 9 No. 1 - Winter 2023

In this issue

President's Message

Artificial Intelligence – At the Service of Big Data

How Digital Dentistry Can Move Your Practice Forward

3D Printing More Accurate than Milling Dental Crowns

Social Media And The Dental Profession

5 Easy Steps to Digital Planning

Incisal Edge Dental Laboratory

Thomas Kitsos, RDT

124 Merton St., Suite #302, Toronto, ON M4S 2Z2

T. 416-489-6533 / 1.877.INCISAL

E. incisaledge@on.aibn.com www.incisaledge.ca

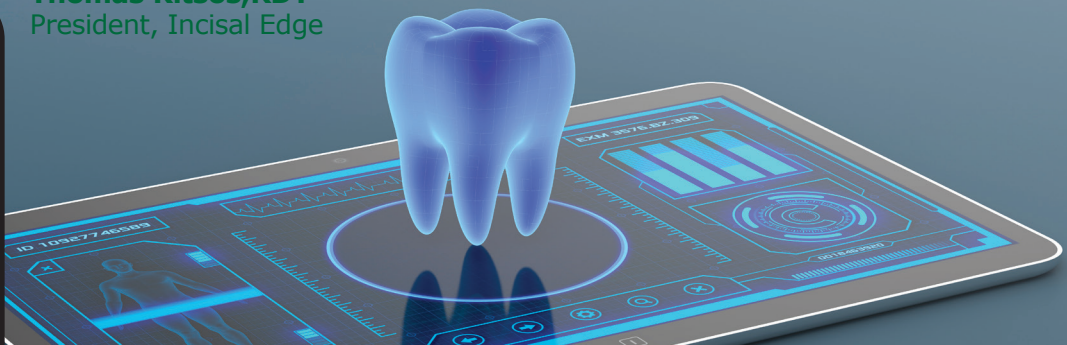


President's Message

Artificial Intelligence – At the Service of Big Data



Thomas Kitsos, RDT
President, Incisal Edge



Our world is changing rapidly. Modern society is undergoing many changes. The never-ending development of new technologies has now reached such an intense pace that it is difficult to follow its progression.

The question before us is whether artificial intelligence - AI - is the hope of the future or if it is its destruction. Some studies speculate that 60% of business can be automated in the next five years. Other studies (Gartner Research) predict that AI will produce more jobs than it displaces.

At a recent World Economic Forum in Davos, Switzerland, Paul Daugherty, Chief Technology and Innovation Officer at Accenture, declared that “Human plus machine equals superpowers.”

At the most recent IDS meeting in Cologne, Germany, the largest dental show in the world, the potential of AI was showcased with impressive robotic solutions for high-production dental laboratories and for clinical dentistry. It was inspiring, but also chilling, to get a sense of what the future could hold.

Although some repetitive tasks can presently be replaced with automation, it remains that dental professionals still accomplish far more than robotics.

Deloitte cites the five skills needed for the fourth industrial revolution: technology and computer skills, robotic and automation programming skills, critical thinking skills, tool and technique skills and digital skills.

Today's dental technicians, however, bring vision and experience - the human element - to prosthetic planning and fabrication. They also possess a passion for artistry and an understanding of human anatomy, tooth morphology, esthetics and materials that simply cannot be duplicated, for now.

Given the high amount of data that is generated every day by the medical sector, AI systems have lent themselves very well to this commercial area, highlighting its ability to manage big data.

A very current example is represented by biotech companies engaged in the production of vaccines. Thanks to AI, big pharma has been able to analyze large data sets and discover new biochemical correlations, essential for developing drugs in a short timeframe at lower cost. Will AI replace dental technicians? If technicians take steps now to keep pace with the evolution and stay ahead of the curve, all answers point to no, for the immediate future.

I would just like to reassure you that this editorial was written by me at my bench with no AI help except for spell check.

I do not think AI could come close to express the message of gratitude I want to send to all my clients for the trust and support in our business relationship. I wish you all a Merry Christmas, Happy Hanukkah & Happy New Year filled with health, joy and laughter. Happy Holidays!!

Thomas Kitsos, RDT

How Digital Dentistry Can Move Your Practice Forward

At Incisal Edge we are lucky that the dentists we work with, are knowledgeable about digital dentistry. However, with advances in technology being ongoing, they admit, that learning is a lifelong journey.

From the lab perspective we see some of the reasons as to why, some dentists find it easier to incorporate digital technology and grow their practices.

They embraced digital technology early... a piece of equipment that revolutionised their practice...

Many of these successful dentists embraced the use of the intraoral 3D scanner. The Cerec Omnicam originally revolutionised their practice. Today there are multiple intraoral scanners and various milling machines, and printers, but a few years ago the clear leader was definitely the Omnicam.

Going outside their comfort zone...

They all made a conscious decision to embrace digital technology. You could say they chose to jump in the deep end. By using the hardware daily they took the software and hardware designs to the absolute limits.

Everyone needs support...

They realized that their supplier should be part of their team. A good relationship with their supplier and lab allowed them to

source better equipment, gain invaluable support with set up and training, but also support in achieving their goals.

There is no secret to being successful in digital dentistry...

They want to do what they enjoy doing the most. They realize that if they don't enjoy what they do, they cannot get the most out of their career.

A hunger to learn...

They know that training should be mandatory because it increases their knowledge and enables them to communicate efficiently with the lab they work with and treat their patients better while enjoying what they are doing.

The patients in turn will be happier in knowing that their dentist is expanding their knowledge and recommend their services to others because they receive superior results.

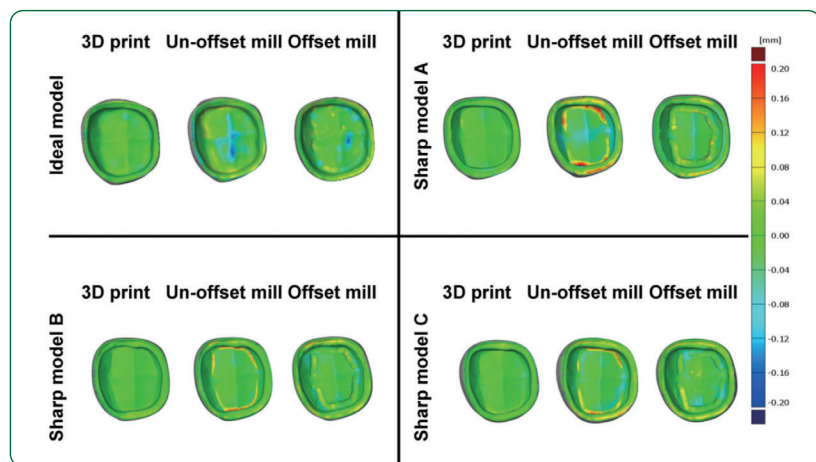
Final Thought...

These dentists are not afraid to go for their goals or try something new, especially when it comes to digital dentistry.

New Study Finds 3D Printing More Accurate than Milling Dental Crowns

Researchers at Japan's Tohoku University Graduate School of Dentistry have found **(DLP) 3D printing to be a more effective means of producing dental crowns** than conventional milling.

Through several testing cycles, the team said their **3D printing dental restorations showed "higher accuracy" and "fewer marginal discrepancies"** than milled alternatives, thus they see DLP as a more "promising technology" for permanent crown creation.



Color maps of the overall deviations seen between design and scan data in molar crowns. Image via Tohoku University

Social Media And The Dental Profession

Many use social media channels including Twitter, Facebook, Instagram and Snapchat to communicate with friends and family. Ofcom research shows that 70% of adult internet users have a social media profile. However, dental professionals are increasingly opting to use social media for professional purposes as well, with the opportunities provided for networking and education.

One issue that can arise for dental professionals is that of maintaining patient boundaries. Sometimes, a patient may send a friend request on social media and you may be unsure how to respond. It is important to maintain patient boundaries in the same way as you would offline. With this in mind, you should not accept a friend request from a patient or allow a patient to follow your personal social media accounts.

Review your security settings

Even if you do not accept a friend request or connect with patients online, it is important to remember that often highly personal information is accessible via social media channels for others to access and view. It is important to regularly check security for each of your profiles and make sure you aren't sharing more than you want to.

The importance of confidentiality

Your duty of confidentiality applies as much online as it does offline and so you should not share anything about a patient that could identify them.

Think carefully before posting any comments about patients. Comments that you think are being shared with fellow professionals might end up being seen by a wider audience and might not be viewed in the same light by others. It is not only comments about patients, but also - photographs, videos, personal opinions and bad language could also get a dental professional into difficulty.

Comments

Patients are increasingly using social media and online rating sites as a tool to post negative comments or complaints. Some of this feedback can feel unjustified, misleading and occasionally it can be abusive, defamatory or offensive. It can be tricky to know how to deal with posts like this. It is natural to want to defend yourself, but sometimes responding can make matters worse by inflaming the situation.



Also, rebutting critical comments directly or attempting to have a post removed could prompt the person to re-post their comments on another site. In addition, if you post a response, this could make the page more prominent in search engine results. If you do decide to respond, it is important to keep any response short, neutral and not to include any personal information about the patient. For example; 'As a practice we were disappointed that you were unable to raise this matter directly with us because we would wish to try and address any concerns. We hope that you will contact us so that we can investigate and address your concerns.' This response not only gives the patient an opportunity to raise their concerns but it also shows anyone else who views the website that you are happy and willing to deal with issues when they arise.

5 Easy Steps to Digital Planning

- *Diagnostic Impression (Digital or Analog)*
- *CBCT Scan*
- *Wax up or mock up (Digital or Analog)*
- *Fusion of data files*
- *Digital planning with or without guided surgery*

