Going digital: considerations

Dan Shaffer explores digital dentistry, and the best place to start when it comes to buying an intraoral scanner

igital intraoral scanners come in all shapes and sizes with varied functionality and connectivity. One thing is for sure though, entry into digital workflows enhances what you do and how you do it. The jump from analogue dentistry into digital opens the door to a plethora of opportunities.

The most precious resource in modern dental practice that bothers all of us is time. For dentists, time is at a premium.

Efficiency is a prerequisite to successfully navigating being a small business owner while providing excellent levels of clinical care.

The pressures on dentists encompass not only seeing swathes of patients, caring for their needs by providing treatments, but also being swamped by compliance, HR and business processes (Johns and Jepsen, 2015).

Who would have thought when exiting dental school that actual dentistry would only comprise a fraction of what we are expected to contend with in our everyday working lives?

ENHANCING TREATMENT

So, what can digital scanners offer us? Digital dentistry is a tool just like any other tool or treatment modality that we have in our armoury, ready to enhance what we do and how we do it.

Let's spare a thought for any other mode of treatment delivery that we utilise in our busy clinics. Whether it is endo or oral surgery, we get the appropriate equipment and expertise to use these tools for our patients' benefit.

We attend hours of courses and ensure that we use everything we've acquired to the best of our abilities in an appropriate way to maximise efficiency and optimise our clinical results.

We keep our patients fully informed about relative risk, costs (both financial and biological) and ensure that the benefits of that specific procedure are highlighted (of course, not exceeding realistic expectations of chance of success balanced against risk of failure).

This is all couched in the reality that what patients are expecting might exceed our confidences and abilities.

How should we be explaining all of this to our patients? According to our regulators, it should be in a way that is objective, subjective and verifiable.

Introducing our biases to the decision making process for one treatment type over another can be seen as coercion. This is the Achilles heel of the modern dentist.

We all shout from the rooftops about how we would never willingly coerce a patient into one treatment over another.

Many patients who are referred to endodontists will be pre-screened to favour saving a tooth. How many endodontists recommend extracting teeth rather than carry out an endodontic procedure?

Most patients who are referred to an oral surgeon would be pre-selected to have teeth extracted before even meeting the surgeon. How many oral surgeons recommend trying to save the tooth?

Do our specialities give our biases away?

When you consider going digital, your first thought might be to get a scanner and include it in your armoury of tools ready for any staff member to roll out at a moment's notice.

Scanning every patient that walks in

through the door might be misconstrued as a loaded objective to recoup a high initial financial outlay.

On the other hand, it is surely advantageous for patients to have their dentitions scanned for many reasons. These include:

- Clinical insight
- Education

caution.

Record retention

• Treatment option visualisation. Collection of vast amounts of data that will require extensive management to ensure its integrity, safeguarding and

interpretation should be treated with

WHICH SCANNER SHOULD I BUY?

When it comes to choosing a scanner, use a tool that is freely available on the internet (such as the Scan Club website) to ensure that you are being steered in the right direction.

Numerous dental companies now manufacture scanners – Dentsply Sirona, Medit, Carestream, 3shape and Planmeca all have offerings. While it might be tempting to ask which is the best scanner, each will have its advantages and disadvantages for different clinicians in different clinical scenarios.

In the words of one of my mentors, a clinical tutor at GKT (the medical school of King's College London): 'One dentist might take a better analogue impression using chocolate cake and Tupperware than another might take using the most expensive impression material and a special tray. What works in my hands might come over as gobbledygook in yours.'

Each dental equipment manufacturer will favour their own equipment over



DAN SHAFFER Dan is an

experienced dentist who has a passion and flair for all things digital. His dental practice, a private digital restorative practice in Hertfordshire, is well respected in the area by patients and dental professionals alike. He manufactures the vast majority of dental restorations in-house and also runs a full-service dental laboratory. Being a registered technician as well as a practising dentist gives Dan a special insight into technically demanding cases both from the laboratory and clinical points of view.

others; they will shout from the rooftops about the specific research that backs up their claims of extreme accuracy/usability/ functionality over all others. Listen to what they have to say and consider taking advice from independent sources.

KNOWLEDGE IS POWER

In my opinion, the leading provider of education in digital dentistry is the International Digital Dental Academy (IDDA) Scan Club.

The founders of the IDDA – Adam Nulty, Chris Lefkaditis, Patrik Zachrisson and Quintus Van Tonder – lead the way to digital enlightenment. Talk to any one of them and they will gladly extol the virtues of one software or technique to enhance what you do.

Scan Club will help you demystify your needs as a clinician, while helping you to identify which scanner will be appropriate for you. The freely offered advice is given without affiliation to any company by practising dentists who use multiple scanners on a daily basis.

FIRST STEPS

The final piece of the puzzle is what to do with your scanner once it arrives and how it can generate income. The scanner will pay for itself in terms of its efficiencies.

A simple procedure to use it for will be to scan a single unit crown prep with an opposing arch and bite and send it to a lab.

The other workflow that is simply too good to miss is the full arch scan, which can then be used for clear aligner treatment plans.

I am clinical director for Active Aligners, a clear aligner company that, from its very beginnings, has considered the technical and clinical aspects in great detail (after all, I am a technician and a dentist). Active Aligners accepts scans from any scanner (polyvinyl siloxane [PVS] is also accepted).

Digital scanning is a non-AGP procedure that is very a la mode; you just need to let your patients know that you are providing this treatment modality.

The American Association of Orthodontists

claims that 50 to 75% of people could benefit from orthodontic treatment.

I believe, when you inform your patients that you are offering cosmetic straightening of teeth using clear aligners, they are keen to know more. They have seen adverts on social media and have heard about more expensive options. It would seem that they are just waiting for a dentist to offer them this treatment at an affordable price. If you offer them the opportunity for smile improvement at an affordable price, they will take you up on the offer.

In my opinion, the best way to start your digital dentistry journey is by joining Scan Club, getting educated about digital workflows by experts and providing clear aligners to your patients.

REFERENCES

Johns R, Jepsen D (2015) Sources of occupational stress in NSW and ACT dentists. *Aust Dent J* 60: 182-189

