Dentsply Sirona offers dental professionals different workflow options

By DTI

Opened almost two years ago, the Digital Dental Academy (DDA) is one of the most modern training centres for dental professionals in Europe and the world’s largest CEREC training institute. The DDA, with its advanced laboratories and high-tech devices, offers individual training programmes for every level of knowledge on CEREC, guided implantology, 3-D planning and diagnostics.

This March, at the Digital Implant Workflow Press Forum, an event devoted to the promotion of knowledge on digital processes in dentistry and organised at the DDA by Dentsply Sirona, Dental Tribune International (DTI) had the opportunity to speak to Dr Volker Winter, Product Manager for CAD/CAM at Dentsply Sirona, about digital technology and its benefits for implant dentistry.

There is a wide range of systems for digital implant workflows available on the market. What advantage does Dentsply Sirona offer dental professionals?

Dentsply Sirona covers every single step, from the diagnosis with imaging systems to treatment planning and execution and prosthetic restorations. What sets us apart from our competitors is that Dentsply Sirona offers dental professionals different workflow options. Some may, for instance, focus fully on chairside treatments. This means that dentists carry out the entire treatment process and even produce their restorations in their own practices.

Another option is what we refer to as the clinic-to-laboratory workflow. It involves working with external partners and dental laboratories. Dentsply Sirona also offers services for this workflow. Each workflow has its own distinct advantages and the choice, ultimately, depends on the particular benefits that users—whether dentists or dental technicians—regard as more advantageous. Besides the two flagship workflows, there are many more options on how to combine elements of each, offering dentists the freedom to adjust their workflow according to their individual situation.

In a chairside workflow, the first step is to plan a prosthetic proposal with CEREC. The basis for implant planning is a 3-D radiographic image. This image is matched with the CEREC Omnicam scan and the prosthetic proposal, allowing all the important information, such as vital anatomical structures, bone quality and prosthetic requirements, to be seen at a glance so that the implant can be positioned ideally. To achieve the best possible implementation of the planning, dental professionals can design and produce the surgical guide (CEREC Guide 2) for the implant placement themselves. The final prosthetic restoration can also be designed and manufactured with CEREC. The CEREC MC XL enables the placement of customised abutments or screw-retained crowns in a single visit.

In the clinic-to-laboratory workflow, the dentist sends out the 3-D imaging data to Dentsply Sirona’s mySimplant Planning Service to receive a plan based on the patient’s individual situation. The dentist can also order a patient-specific Simplant Guide through mySimplant Planning Service for guided surgery. For the design and man-
ufacture of the final restoration, the digital file from the intraoral scan is sent to a dental laboratory via Sirona Connect. Alternatively, the order can be initiated automatically in Atlantis WebOrder, also via Sirona Connect.

The great advantage of the digital implant workflow is its flexibility: dental professionals can decide freely on those parts of the workflow that they want to keep in-house, those where they would like external support and those that should be outsourced completely. The ability to implement all these processes with a strong and experienced partner—Dentsply Sirona—is unique in the market. Dental professionals can rely on proven protocols and thus gain surety in their treatment planning.

Dentsply Sirona offers integrated workflows with a complete product portfolio in which all components work together seamlessly. Owing to their high degree of standardisation, our digital workflows improve the predictability of a treatment outcome and allow for fewer sessions, increasing clinical safety and patient comfort. Dentsply Sirona products are based on a solid foundation of research and development, as well as years of experience and documentation.

How can CAD/CAM technology improve the quality of the workflow for implant specialists in particular?

The advantage of CAD/CAM technology is that it standardises processes, making them safer and faster. This starts with radiographic images, which offer the third dimension required for digital implant planning. The planning works digitally as well. The special feature of virtual treatment planning is the ability to produce a custom-made surgical guide, which has been proven to increase the safety of the surgical procedure.

For prosthetic restorations, digital workflows are especially useful owing to their high precision and time-savings. As already mentioned, this creates more comfort for the patient and possibly fewer sessions at the dentist.

In November 2017, Dentsply Sirona received an honourable mention for CEREC Guide 2 for the third Innovaatio (Innovation) Award. What makes this surgical guide so special and to what extent does it enhance the digital implantology workflow?

We were delighted to have received this award. It is a tribute to our concept of providing sophisticated solutions for everything from diagnosis to planning to final patient care. The surgical guide not only supports the surgical procedure itself but also the exact implementation of the planned prosthetic situation.

The surgical guide improves implantation and achieves a precision during the surgical procedure that is hardly possible freehand. This safety benefits the treatment and thus the patient. It is extraordinary that as a dentist, one can produce this surgical guide directly within one’s office.
practice—quickly and inexpensively. This is only possible through digitisation.

How have dentists responded to the trend of digital dentistry? Do you think that the majority of practices and laboratories will soon be using or considering using digital technologies?

When we talk about digitisation in general, the question is no longer whether dentists and dental technicians are increasingly digitising their practices and dental laboratories, but how they are doing it. This has become very clear at international dental congresses and fairs. It is important that these technologies bring tangible benefits, such as better image quality, treatment safety or time-savings. Digital technologies simplify the work of dentists and dental technicians and even introduce new treatment options. I am convinced that this will become standard everywhere in the long term.

Dentsply Sirona is the market leader in the field of CAD/CAM systems for the dental practice and among the leading providers in digital imaging. As digitisation becomes more prominent, it is becoming increasingly important to avoid isolated solutions—the controllability and the overview are lost. We make every effort to combine the individual components into customer-oriented solutions. Our customers appreciate that it is not required of them to become an IT or engineering specialist in order to use them. Instead, they can concentrate on their actual work, the treatment of their patient. This also includes training our customers to properly implement our workflows.

Dentsply Sirona invests a great deal in CAD/CAM education and offers courses and individual training—the DDA is an excellent example of that. How has this service been received so far?

I have to say that the DDA is not a Dentsply Sirona facility, but was founded by CEREC enthusiasts involved in the Deutsche Gesellschaft für computergestützte Zahnheilkunde [German society for computer-aided dentistry]. Dentsply Sirona CAD/CAM supported the spacious course facilities with 20 CEREC units, five treatment centres (Teneo), a radiographic device, and eight inLab workstations with dental laboratory scanners, milling units and sintering ovens. Dental professionals can also familiarise themselves with the new CEREC Zirconia workflow, with which full-contour zirconia restorations can be produced in just one session. All areas are part of a fully digital network, from the radiographic device to the treatment centre.

The first year of the DDA was already a great success, with about 140 courses attended by some 1,000 participants, according to Dr Klaus Wiedhahn, one of the co-founders. The concept of relocating an important pillar of qualified CEREC training to the DDA, in addition to offering basic seminars in medical practices, has proven a complete success.

Thank you very much for the interview.