

On the occasion of the European Press Talk for the 38th International Dental show (IDS) on 23 January 2019 at the Telekom Gallery in Bonn, Dr. Peter Engel, President of the German Dental Association and Dr. Dominik Kruchen, President of the Association of German Dental Technicians (VDZI), talked about the opportunities of digitalization

Digitalisation: Taking Opportunities, Avoiding Dangers

by Dr. Peter Engel

Every other year, the International Dental Show (IDS) in Cologne presents the global state of the art of dentistry and dental technology. IDS always has its finger on the pulse of the times – this is where you will first see the trends and innovations that will be commonplace in dental practices tomorrow. Together with its partners, the Federal Chamber of Dentists (Bundeszahnärztekammer, BZÄK) always likes to take the opportunity to present itself to visitors with its own stand in this international and dynamic environment.

Digitalisation will remain the dominant topic in the dental industry in 2019. No previous development has had such a significant effect on the structures of the healthcare system in general or on pro-

fessional practice and the relationship between dentists and patients in particular. The majority of dentists view the enormous transformation potential of digitalisation with relaxed optimism. That's

because our profession has always been receptive to digital opportunities – indeed, you could say that they are part and parcel of day-to-day work in a number of areas, from IT networks and 3D printing



Dr. Peter Engel, President BZÄK, Dominik Kruchen, President VDZI, Markus Heibach, CEO of the Association of German Dental Manufacturers (VDDI) and the Society for the Promotion of Dental Industry, GFDI - the commercial enterprise of the VDDI, Dr. Bernd Rebmann, Rebmann Research GmbH & Co. KG



Telekom Design Gallery, Bonn (Germany)



Dr. Markus Heibach, CEO of the Association of German Dental Manufacturers (VDDI) and the Society for the Promotion of Dental Industry, GFDI - the commercial enterprise of the VDDI-, Dr. Peter Engel, President BZÄK, Gundula Gause, Journalist, Dominik Kruchen, President VDZI, Mark Stephen Pace, Chairman of the Board, Association of German Dental Manufacturers (VDDI), Gerald Böse, President and Chief Executive Officer of Koelnmesse GmbH, Frank A. Schloße, Vice President Sales Healthcare of Deutsche Telekom Healthcare, Telekom Design Gallery, Bonn

to forms of treatment and process management. These developments must in the end be reflected in the remuneration. Adjustments to the scale of charges for dentistry (Gebührenordnung für Zahnärzte, GOZ) are urgently required.

Digital innovations must serve patient welfare

One example of how the advantages offered by digitalisation can be safely applied is the online dental reporting and learning system "CIRS dent – Jeder Zahn zählt!". This platform allows dentists to discuss undesirable incidents from their everyday practice anonymously and in private. However, there are also negative developments in the digitalised fields of dentistry. One example is how various dental suppliers offer courses for dental assistants on a CAD/CAM method for reconstructing dental restorations. After having attended a course lasting only a day and a half, they are then supposedly qualified to carry out dental services such as the construction and customisation of dentures. This is a contravention of the Dentistry Act since dental assistants are hereby carrying out tasks that only dentists are legally allowed

to do. The (State) Dental Chambers have quality-assured and technically competent service offerings in this regard.

This most recent example shows that we – despite all the digital euphoria – must insist, because of our professional ethics commitment, that digital innovations always serve the well-being of patients.

The data sovereignty of patients must be maintained

One important fact the digital transformation over the last few years has taught us is that this development comes with both opportunities and risks. There are practically no limits to the use of digital processes – they can lead to truly pioneering results in foundational and health-services research, in new forms of treatment and in diagnostic techniques.

But we observe with concern the way health insurance funds, insurance companies, tech groups and even some public institutions infringe on the data sovereignty of patients under the pretext of cost saving, user friendliness or administrative necessity. We would also warn against the use of apps and platforms that provide treatment tips and reviews of medical practitioners.

This opens the door for abuse if positive reviews can be easily bought by the dozen for a few hundred euros.

Our politicians are also struggling to keep up with the fast pace of digital reality – see for example the electronic patient file. The Digitalisation in Healthcare Act that has been announced is therefore urgently needed.

When it comes to providing medical care and advice to patients, "Dr Google & Co." cannot hope to replace dentists. And patients are also reliant on the support provided by dentists in another way: when it comes to their data protection rights.

It is unacceptable that insurance companies and health insurance funds use patient data to offer them treatments. It is for patients – in consultation with their doctor or dentist – to decide on a medically indicated treatment. That should not be up to the algorithms of a health insurance company app!

The Federal Chamber of Dentists, together with the State Dental Chambers, is campaigning to ensure that the data sovereignty of patients and therefore also of dentists is not violated when it comes to processing the enormous volumes of unstructured health data that is collected everywhere. This is our priority because it defends the highest principle of our profession, namely the relationship of trust between patient and dentist.

Digitalisation brings with it an almost infinite range of possibilities. These, however, must not be used if they limit the free choice of doctor/dentist, the medical practitioner's freedom to provide a treatment, our self-employed status or our professional rights. These principles guarantee the best possible quality of care for our patients. And that is the essence of our professional ethics commitment.

The Federal Chamber of Dentists is, once again, represented with its partners at IDS in Hall 11.2, Aisle O/P, Stand 50/59. You will find an overview of what's going on at the stand here: www.bzaek.de/fileadmin/PDFs/ids/ids_programmflyer_bzaek.pdf

Contact person:

Dipl.-Des. Jette Krämer
Phone: +49 30 40005 150
E-mail: j.kraemer@bzaek.de

Innovative Trade, Digitalisation and System Partnership

by Dominik Kruchen

The innovative dental technician trade always accompanies developments in the dental industry with specialised expertise and knowledge based on experience. This is why dental technician masters and dental technicians once again look to continuing developments in technologies and materials through the filter of their trade expertise at IDS 2019.

The basis for the application of the innovations shown in Cologne is the knowledge acquired in the three-and-a-half-year dental technician course of training and in the master training. As a medical product, each dental prosthesis is and remains a unique piece manufactured individually for patients. Manufacture is subject to the clear rules of the Medical Devices Act. For this reason, the presence of the master is obligatory in the dental technician trade, which tends to involve risks. This must also remain so in future. These proven structures ensure the entire spectrum of individual dental prosthesis solutions for patients. Technical aptitude, intuition, the ability to concentrate, comprehensive anatomical and medical knowledge, expertise in physics and chemistry, visual perception and aesthetic judgment - all of these qualities still characterise analogue dental technology. Alongside this, digital data processing and production with the help of computers are playing an increasing role in the "master" trade. This involves knowledge of modern materials and procedures for the processing of these, which are continuously being expanded upon in the laboratory by the masters and the teams.

Digital production in the "master" trade
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ready replacing partial steps in the production of dental prostheses as a supplementary tool, for example, in the provision of crowns and bridges. Dental technology master laboratories use scanning technologies, open CAD/CAM systems, processing machines and rapid prototyping methods in routine laboratory work. Digital additive production (3D printing) has been available to the laboratories for work preparation for several years now. In the so-called laser sintering method, for example, frames for crowns, bridges and even bases for prostheses can be produced additively from metal.

The thesis has generally become widespread in past years that the introduction of 3D printing will soon make the dental technician obsolete. However, this is and remains an illusory claim, because it will also not be possible in future to automatically produce a definitive dental prosthesis at the push of a button using a 3D printer.

Digitalisation – training and occupational profile

When one looks at the possibilities of the dental technology manufacturing processes in the context of digitalisation being shown in Cologne in March, one can recognise the considerable restructuring these involve for the operative processes in the master laboratory. This will have a sustained impact on the occupational profile in the dental technology health care profession. For this reason, the VDZI is striving to revise the training regulations together with the responsible partners after more than 20 years. Thus, the digital workflow should now also be fundamentally and bindingly implemented in the testing system. Already in 2010, the VDZI strived for the introduction of digital training content into the dental technician trade and implemented this at the national level with the ÜLU ZAHN4/I I (Inter-company apprenticeship training). This is having a highly positive ef-



fect as the basis for qualified apprenticeship training, and especially apprentices with little professional experience in the field of CAD/CAM are also gathering experiences they can subsequently apply in their training companies.

In the case of "Scanning with various methods, for example, intraoral and extraoral, tactile and visual", the trainees also acquire experience with digital impressions in the context of the ÜLU. Here it can be seen that so-called oral scanning principally represents an activity within the occupational profile of the dental technician that shapes the occupational profile. The oral scan is an alternative to the classic impression. A digital cast is made with an intraoral scanner. When considering the protective interest of the state with regard to overall health, which is regulated in the Dentistry Act and may

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apply to conservative impressions, there is no adequate reason to assign the oral scan exclusively to one occupational profile. With this question in mind, the VDZI is striving for the creation of legally binding regulations allowing dental technology masters to carry out the oral scanning of patients ordered by dentists.

Data security and data protection important for all participants

However, digital technologies are not only used in production. Many dental technology laboratories use these for their internal processes in planning, procurement, production or logistics. Communication with suppliers of dental technology materials and technologies, such as dental depots or dental customers is being increasingly maintained digitally. Questions of data security and data processing are



therefore important for all participants. In the context of the General Data Protection Regulation, a great deal of uncertainty prevailed with regard to the question of the processing of order data for the manufacture of dental prostheses. Because the contractual relations between the dentist and the laboratory are regulated by a contract for specific work, from the perspective of the VDZI there is no order processing and no cooperation based on the division of labour between a responsible person and an order processor for the purpose of processing personal data. Support came from the umbrella organisation of the trade, as well as from the relevant data protection authorities, such as the data protection officer for Hessen and the Bavarian state office for data protection monitoring (BayLDA). With regard to this question, the VDZI continues to strive for the corresponding clarification with the aim of establishing legal clarity for all participants.

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System partnership ensures supply structures close to the place of residence

Despite all of the technological development, the close technical cooperation in a spirit of partnership between the commercial dental technology laboratory and the dentist's surgery remains the pillar of the supply of dental prostheses. This system partnership is the decisive prerequisite for a local patient supply structure. Profit-oriented providers of outside capital that are infiltrating the dental panel doctor supply through the so-called medical service centres endanger these structures and the free health care profession of dentistry. With regard to this question, the VDZI agrees with the skeptical attitude of dentists.

Yet another aspect is important for the dental technician trade. The so-called "practice laboratory" in the medical service centre serves as an internal profit centre from the perspective of the VDZI. The service is taken from the competition and the commercial dental tech-



nology laboratories thus suffer massive damage. To the extent that the political system continues to favour and promote the occupational group medical service centres, as demonstrated by the draft for the schedule service and care act (TSVG), the currently still permitted owning and operation of a dental laboratory in a dental medical service centre should be prohibited.

The economic situation in the dental technician trade

The 71,500 practising dentists in Germany can rely on the practical and local services of 8,150 professional dental technology laboratories. In 2017, 64,668 people (dental technicians, dental technology assistants and other laboratory workers) were covered by statutory occupational accident insurance by the trade association (BGETEM/Trade Association for Electrical Engineering, Textile and Precision Mechanics) responsible for the dental technology trade.

Around 35,000 qualified dental technicians are currently employed full time in production. These are joined by around 5,500 young people currently completing highly qualified training in a commercial dental technology laboratory.

The total market for dental technology services (material and lab costs, not including dentist fee) in Germany amounted to around 7.5 billion Euro according to the latest figures provided by the Federal Statistical Office.

In the first nine months of 2018, as in previous years, a stagnating demand for dental technology services from the commercial master laboratory was registered. Following a decline in turnover in the first quarter of 1.7 percent in comparison with 2017, a slight turnover increase was documented in the second quarter in comparison to the corresponding quarter of the previous year. The plus amounted to 1.1 percent, but the determined mid-year result was still 0.2 percent lower than the first six months of the previous year. A very similar picture is found when one considers the financial development of the statutory health insurance system: in the first half of 2018, the expenditures for fixed allowances for dental prosthe-

ses were hardly 0.35 percent higher than those of the previous year, according to the preliminary reporting of the Federal Ministry of Health.

The evaluations of the VDZI economic situation survey showed an increase in turnover for the third quarter of 2018 of 1.7 percent in comparison with the same quarter of the previous year; the cumulative result of the first three quarters amounts to a marginal turnover increase of 0.4 percent in comparison to the first nine months of the previous year.

The dental technician trade at the IDS - strong young generation presents itself

IDS 2019 will once again be a display window for the dental technicians of tomorrow. The strong young generation demonstrates its ability for the Gysi Prize, the "competition of the apprentices" in the dental technology trade. All visitors to the

IDS can once again see for themselves this year.

The best dental technology works of the participants from the 2nd, 3rd and 4th years of apprenticeship will be honoured with the Gysi Prize, named for the researcher and teacher Alfred Gysi (1865-1957). The participants will complete their competition works by the end of January, and these will then be anonymously evaluated by a jury of experts at the beginning of February.

The award ceremony for the renowned VDZI young generation competition takes place on 14 March from 3:00 to 5:00 p.m. in the Europasaal, Congress Centre East of Koelnmesse.

The dental technician trade is looking forward to the International Dental Show in March. The trade fair stand of the VDZI in hall 11.2, corridor S 10/12 will be the meeting place for all questions concerning dental technology during the trade fair.

ABOUT VDZI

The VDZI, with its head office in Berlin, represents the economic interests of the dental technology master laboratories in the guilds as the federal guild association.

President Dominik Kruchen and his deputy Klaus Bartsch currently head the VDZI. The main task of the VDZI and of the guilds is to represent the professional and economic interests of the German dental technology trade.

The supreme goal is to secure the performance capability of the dental technology master laboratories as a prerequisite for a quality-assured supply of dental prostheses for the population of Germany. Fourteen guilds belong to the VDZI.

Contact person:

Gerald Temme

VDZI Press Office

Tel.: +49 30 8471087-12

gerald.temme@vdzi.de