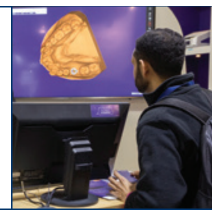
today SHOW PREVIEW

39th International Dental Show • Cologne • 22–25 September 2021



The show must go on—dental industry looks ahead confidently

IDS will help revive market situation after significant turnover decline in 2020.

■ In preparation for this year's IDS, the organisers held a live online press conference via YouTube in May to inform international media partners about the upcoming event. A unique mix of analogue and digital formats is planned for the event and will make IDS 2021 a very special event that will meet the demands of this extraordinary time.

The press conference was held under the motto "Out of crisis management and into future orientation", which will also be the motto of the 39th IDS, which will take place from 22 to 25 September in Cologne.

Mark Stephen Pace, chairman of the board of the Association of the German Dental Industry (VDDI), said that everyone was looking forward to the event. There was great optimism, mainly because "developments are going quite well", "measures are having an effect", and "vaccination successes are increasing worldwide".

Pace explained why the implementation of the IDS is so important, arguing that it is important for the dental profession to have access to innovations and to be able to talk about them. As an example, he mentioned topics such as artificial intelligence, which is progressing despite the pandemic, and which must be discussed. He further emphasised that he and the business organisation remain confident about the future economic position of dental companies despite a significant decline in turnover in the 2020 fiscal year.

European press conference, from left to right: Dr Peter Engel, former president of the German dental association; Dominik Kruchen, president of the association of German dental technicians' guilds; Dr Marco Landi, president of the Council of European Dentists; Corinna Mühlhausen, Zukunftsinstitut Frankfurt; Mark Stephen Pace, Association of the German Dental Industry (VDDI) chairman; Oliver Frese, chief operating officer of Koelnmesse; moderator Nadja Cleven; and Dr Markus Heibach, executive director of VDDI. (Image: Koelnmesse/IDS)

> *"Digitalisation helps us become more efficient, improve communication and reduce costs, but it is no substitute."*
>
> *Mark Stephen Pace, VDDI*

According to a Treuhand trust survey that was launched at the beginning of 2021, the VDDI member companies earned a total turnover of €4.82 billion in 2020, 13.1% less than 2019. About €2.92 billion, a drop of 16.5%, was earned in export markets.

The German domestic market however developed considerably more robustly than the export markets. In 2020, domestic sales reached €1.9 billion and were thus only 7.3% lower compared with the previous year. Overall, slightly more than two-thirds of the companies that took part in the survey reported lower domestic sales figures than in 2019.

Pace stated that, by implementing measures to increase efficiency and reduce costs, dental companies had done their utmost to ensure that declines in sales did not escalate.

Although Pace assumed that some companies would keep struggling for some time to reach 2019 sales levels, the survey also indicated that the industry would most likely experience a recovery throughout the course of this year. Over 50% of the surveyed companies forecast an increase in turnover in 2021, and an additional 42% expected at least a turnover at the level of 2020.

"Not all regions will recover at the same pace. Some economic regions are still occupied with overcoming the corona crisis. The health systems are under a high degree of pressure, but we can assume that in the medium term the success of vaccinations will also lead to recoveries in these regions. The general health awareness and a need for health services resulting from this will increase," Pace concluded.

Oliver Frese, chief operating officer of Koelnmesse, stated that the security concept implemented by Koelnmesse will keep visitors safe and ensure that exhibitors are successful. (Image: Koelnmesse/IDS)

The 39th IDS will be a hybrid event—that is, a combination of on-site events and sections that will take place online. According to Dr Peter Engel, former president of the German dental association, and Dominik Kruchen, president of the Verband Deutscher Zahntechniker-Innungen (association of German dental technicians' guilds), these concepts have already yielded positive experiences. They have found that dentists are able to get used to the new concepts relatively quickly owing to their affinity for technology and their openness. Nevertheless, "people also want to meet in person," Kruchen added.

Pace reiterated the importance of digitalisation and that progress had been made, but stated that there is clearly a lack of infrastructure to move forward. He also feels it is essential to meet in person and said: "It is very important that we maintain relationships. The most important part of successful business is not possible without face-to-face meetings. Digitalisation helps us become more efficient, improve communication and reduce costs, but it is no substitute."

Dr Marco Landi, president of the Council of European Dentists, agreed and then summed up by stating that September is the right time to take off again in the dental industry across Europe.

Although some major players in the dental industry, including Dentsply Sirona, will not be taking part in this year's IDS for "various reasons", the organisers hope that an interesting trade fair can be created with the companies that have registered so far.

The latest information on IDS can be found at www.english.ids-cologne.de. ◂◂

"IDS will light the way for the whole dental industry"

An interview with Mark Stephen Pace, chairman of the Association of the German Dental Industry, ahead of IDS 2021 by Christian Ehrensberger.

Mark Stephen Pace, chairman of the Association of the German Dental Industry. (Image: DENTAURUM/Andreas Fabry)

From 22 to 25 September, Cologne will once more become the place to be for dental professionals when the 39th edition of IDS takes place. Mark Stephen Pace, chairman of the Association of the German Dental Industry, discussed his optimism ahead of the event and the innovations that he sees as drivers of the dental industry's future.

Mr Pace, IDS 2021 is just around the corner. Are you worried that another COVID-19 wave will still prevent the trade fair from taking place?

I think we have two options. Either we assume that IDS cannot take place under any circumstances and slide into depression, or we accept the challenge and ask ourselves: what do we have to do to ensure IDS 2021 will be a success for all involved and lead our industry into a new normal? I have unequivocally decided in favour of this second option.

With IDS only a few weeks away, we can sense the promise of a new beginning. IDS will light the way for the whole dental industry!

What steps have you taken to make IDS 2021 a success?

We have created safe conditions in the trade fair halls. The #B-SAFE-4business concept has been specifically developed for this purpose and gives us great flexibility. If, for example, the minimum social distancing requirements are decreased or increased the day before the trade fair begins owing to the COVID-19 incidence rate at the time, we can react immediately to the situation. Visitor management will then also change accordingly. This will be conducted via our indoor positioning system, developed in conjunction with Samsung SDS, using the associated eGuard smartphone app.

We must, of course, acknowledge that we cannot prevent unexpected developments related to the COVID-19 incidence rate in the broader population. Anything that occurs under the present conditions over the next few weeks will see us go as far as humanly possible to find a solution for the trade fair. IDS 2021 will be a safe place, not least because visitors from industry and trade, and dentists, dental technicians and their teams deal professionally with hygiene and infection control on a daily basis—and thus will also do so at IDS.

What do you see as the major topics that are shaping dentistry?

We have all certainly endured some difficult months, but are now realising that it's going to be different in the future—things are looking up. We must, however, also reorientate ourselves and adjust to these new conditions.

Proven and innovative products, both small and large, aid in daily dental routines—and will be available at IDS 2021. (Image: Koelnmesse/Thomas Klerx)

For me, the first priority is to assess the situation and be proactive. Patients come into the dental practice with a greater awareness of health and its various dimensions. Many patients now understand that oral health and general health are closely linked and that strengthening periodontal health is also a protective factor against severe progression of COVID-19. While this has been reliably proved in studies, reduction of other oral inflammation—for example of the dental pulp—through treatment is also a likely advantage for general health. Presumably, this is also a positive component in the defence against COVID-19.

We can take advantage of this increased awareness in patients by discussing the subject with them and using it to create awareness of the importance of recall appointments, as well as the value of high-quality dentistry.

What does this mean for IDS visitors?

As a trade fair visitor, I would look around to see how I can offer patients the best possible dental treatment using state-of-the-art technology. This begins with periodontal prophylaxis—virtually nowhere else can you find such a large selection of manual instruments, sonic and ultrasonic instruments, and powder-water jets. At the same time, information will be available regarding adjuvant measures such as the administration of chlorhexidine and laser treatments. At the trade fair, dentists and dental assistants will also find products that can provide maximum protection of or relief for their tendons, ligaments and joints.

Similarly, with regard to oral inflammation, IDS 2021 offers attendees the opportunity to test and compare proven and innovative procedures and products. To mention just one interesting detail: during diagnosis of irreversible pulpitis using analysis of inflammatory markers, it can emerge that the tooth can still be retained vitally through pulp capping with bioactive or bactericidal material. This approach would probably be employed more often with wider availability of the analytic test procedure.

At previous IDSs, the focus has commonly been on digital technology. Where is the development of digital technology headed?

Digital technologies have, in general, maintained their momentum over the course of the pandemic, and the dental industry remains a leader in this regard. In attending this year's IDS, both dentists and dental technicians are likely to have the following two questions in mind:

1. What can be digitised in my dental practice or laboratory so that I can offer patients added value at a fair and considered price?
2. What areas can utilise combined analogue and digital procedures as an alternative to complete digitisation? For example, a complete denture can either be completely 3D-printed or be set up conventionally on a printed or milled denture base with artificial alveoli and retained using an adhesive in the final stage.

CAD/CAM fabrication will be a focal topic of IDS 2021. (Images: Koelnmesse/Harald Fleissner)

You have already discussed various fields of innovation. What innovation at IDS 2021 will help to take the industry forward the most—perhaps self-regenerating teeth?

IDS always offers surprises as far as innovation is concerned. Self-generating teeth are unfortunately still the domain of sharks, but innovative concepts for single-tooth restoration of implants using digitally supported backward planning, however, is something I can very much picture. Innovations that can be implemented immediately in the dental practice and laboratory will also be present at IDS 2021.

The biggest innovation for me, though, is a new sense of togetherness. I experienced this already at the European press conference in the run-up to IDS 2021, and at the event itself, we are coming together again. We will be talking to each other and actively looking for competition to ensure that we can secure the best deals. Personally, I'm curious to see what interests dentists and dental technicians most, and I wish everyone a safe and exciting IDS 2021.

EU wakes up to new medical device regulations

What will change under the EU's new medical device regulations?

■ After a three-year transition period and a delay of 12 months owing to the SARS-CoV-2 pandemic, new regulations for medical devices for human use in the European Union went into force on 26 May. The new and stricter rules mainly apply to those who manufacture, import and sell medical devices; however, dental professionals should be aware that distributors must keep a register of any complaints or reports received from health professionals and patients relating to devices and forward these complaints to the device manufacturer or importer.

Commonly referred to as the MDR (Medical Device Regulation), Council Regulation (EU) 2017/745 came into effect on 25 May 2017 with a grace period of three years. The MDR repealed Council Directive 93/42/EEC, known as the Medical Device Directive (MDD), and Council Directive 90/385/EEC, which regulated active implantable medical devices in the EU. An additional directive—Council Regulation (EU) 2017/746, known as the In Vitro Diagnostic Regulation (IVDR)—came into effect in tandem with the MDR and is set to regulate *in vitro* diagnostic medical devices when a five-year transition period expires in May 2022.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The European Commission, in April last year, announced a 12-month delay of the application of the MDR. A statement from the commission explained that the decision was made so that member states, health institutions and commercial operators in the medical devices industry could prioritise efforts to combat the pandemic. "Shortages or delays in getting key medical devices certified and on the market are not an option right now," commented Margaritis Schinas, vice president for promoting our European way of life, in the media release. Indeed, the MDR is denser and more complex than its predecessor and transposing the directive has been a mammoth task for all stakeholders.

Compared with the repealed MDD, the MDR changes device scope and the way that medical devices are classified. For example, the legislation includes new rules for devices that use hazardous substances and for software applications. Some devices have been reclassified under the MDR, and the directive regulates certain devices that were previously exempt from medical device regulations.

The MDR also brings changes to the oversight process. Under the new directive, only notified bodies that are designated under the MDR can verify medical devices as being fit for use in the EU. Notified bodies that were designated under the MDD must be newly designated under the MDR. According to a white paper published by the Brussels-based European business law firm contrast and the Association of Dental Dealers in Europe—seen by Dental Tribune International—the public health situation in Europe has hampered efforts to designate enough notified bodies. Since some notified bodies that were designated under the MDD may not receive designation under the MDR, it is expected that some medical device manufacturers will need to change notified bodies.

Other examples of the various changes brought by the MDR include a redefined economic operator concept, which differentiates between manufacturer, authorised representative, importer and distributor. All economic operators must conform to the directive and the responsibilities of these stakeholders are expected to increase.

The MDR also brings heightened post-market surveillance to the medical devices market, and EU member states are required to adopt penalties for any infringements of its requirements. Unique identifiers must be placed on medical devices so that they can be registered on a new European database. Named EUDAMED, the database will record the registration of devices, the accredited notified bodies, and also certificates and reports of incidents relating to the safety and clinical performance of devices.

Distributors will be required to keep a record of any complaints or reports that they receive from health professionals and immediately forward them to the manufacturer and/or importer of the device in question. Distributors of medical devices must also keep a register of non-conforming devices and devices that were recalled or withdrawn from sale.

The full text of the MDR is available at https://eur-lex.europa.eu/eli/reg/2017/745/oj. ◂◂

IDSconnect: The new digital event platform of IDS

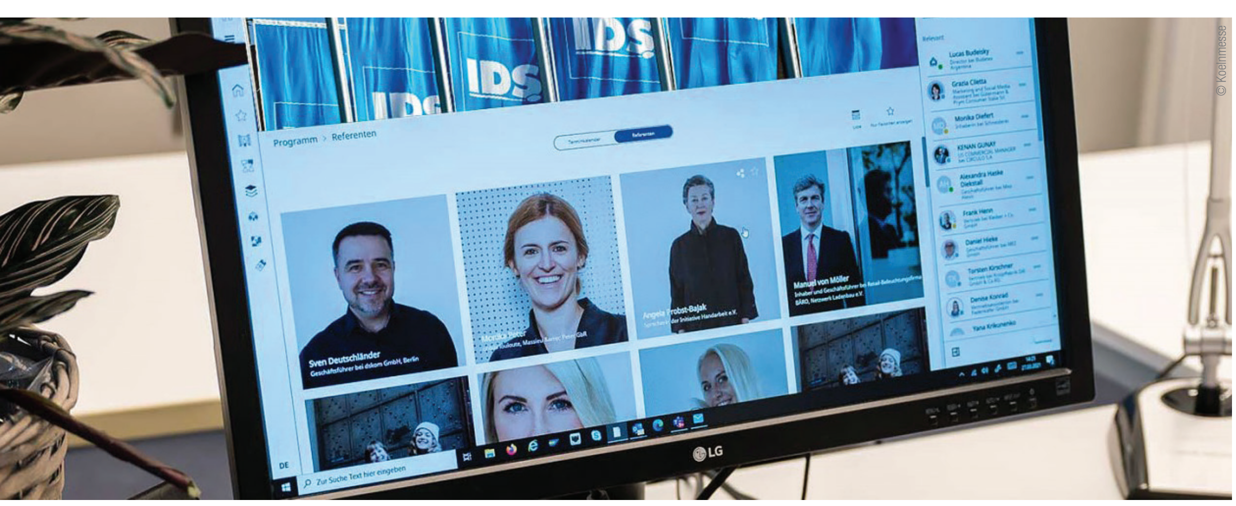
Koelnmesse has stepped up its game to make IDS a successful event—online and offline.

■ In 2021, IDS is going hybrid, which means that more participants than ever before will attend the largest trade show in the dental industry from the comfort of their homes and not in person, owing to COVID-19 travel restrictions. To provide a digital enhancement to the classic physical event, the free platform IDSconnect intends to maintain IDS's extensive international reach together with a successful on-site trade fair experience.

At a trade fair or in day-to-day commercial business, a company's success is based on three essential building blocks: inspiration, interaction and business. IDSconnect provides innovative opportunities for you to reduce the effects of any current deficit in these crucial elements. Extensive features enable you to reach more potential customers easily, to experience trends and lectures on demand, and to establish valuable contacts—from anywhere in the world.

The experience starts in the Lobby, where users find an overview of all the features as well as initial recommendations for relevant contacts, exhibitors and upcoming scheduled trade fair items. Features include top experts on stage presenting on industry-relevant topics live from Cologne or streaming from locations throughout the world. The IDS Main Stage is the central platform for the official event programme of IDS 2021. This is where to find insight and motivation in the many presentations and official side events. Let yourself be inspired by the visionary programme.

The area Exhibitors and Products represents the exhibition hall. From there, users have access to the booths of the various exhibitors in so-called Showrooms in which relevant information about the exhibitor's company, products and services will be provided. On the Product Stage, exhibitors will present product innovations and highlights live to the audience. Alternatively, these can be watched later on demand.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At a Virtual Café, visitors, exhibitors, top decision makers, purchasers, industry experts and media representatives can come together to chat and network. In terms of networking, the Discovery Graph ensures networking with new contacts and achieving a direct exchange of ideas via the communication centre.
More information about IDSconnect can be accessed at https://www.english.ids-cologne.de/fair/idsconnect/. ◂◂

Around 830 exhibitors from 56 countries to attend IDS 2021

High number of international companies underscores importance of global industry platform.

■ The International Dental Show (IDS) will be opening its doors for the 39th time from 22 to 25 September. Owing to the ongoing global SARS-CoV-2 pandemic, which led the organisers to postpone the event from March to September, this year's edition will be taking place under extraordinary circumstances. Although a considerable number of companies will not be exhibiting at IDS, about 830 companies have already confirmed their participation.

According to the latest figures by Koelnmesse, 74% of exhibitors come from abroad, including from France, Great Britain, Italy, South Korea, Switzerland and the US. Companies from Brazil, Bulgaria, China, France, Italy, South Korea, Russia and the US will have country-specific pavilions. In a recent press release, Koelnmesse stated that the high level of international participation underlines once again the outstanding significance of IDS as the most important global dental industry platform.

Overall, the organisers predict that IDS will play a key role in the successful restart of the market. Throughout 2020, dental companies around the globe reported the financial effects of government-imposed lockdowns and radical public health measures, including the partial or complete closure of dental practices. As revealed by the fourth-quarter results for 2020 and this year's first-quarter results, the industry is slowly but steadily recovering from the crisis.

In order to protect and ensure the health and safety of exhibitors and visitors alike, rigorous protective measures in line with the official requirements have been taken into account in the allocation of the exhibition floor. IDS 2021 will be staged in Halls 2, 3, 10 and 11, which are connected via a simple circular route. Visitors will be able to enter the fair through four entrances, which will allow for an even distribution of attendees across the exhibition halls. To meet social distancing rules, the existing restaurant and resting areas in the halls have been expanded and a new food area has been installed in Hall 4.1.

In addition, the organisers are extending the physical event in Cologne through the digital platform IDSconnect. This strategic move to make IDS 2021 a hybrid event will benefit both dental professionals and companies and, in particular, those who will not be able to travel to Cologne in September, as it includes a number of innovative features that will allow users to discover new products and connect with colleagues and partners online. More information about IDS can be found on the https://www.english.ids-cologne.de/. ◂◂

For patients looking for high-quality dentistry, IDS provides the answers

An overview of the state-of-the-art technology on exhibit at IDS 2021 by Christian Ehrensberger.

The whole range of filling treatments at the world's leading dental trade fair: Some of the goal-oriented and attractive solutions for dental practices from Silfradent, Polydentia and GC that will be on display at IDS 2021. (Images: Koelnmesse/IDS Cologne/Harald Fleissner [1 & 2]/Thomas Klerx [3])

■ The development of dental practices is in a much better position than one and a half years ago, and the COVID-19 pandemic is even showing positive signs. The 2021 IDS in Cologne will provide a view into where we are headed.

Oral health: A key theme and an opportunity for the dental practice

Broad segments of the population are becoming increasingly interested in health, nutrition, physical activity, sport, medicine and more. This has resulted in a particularly strong focus on dentistry, since many patients are becoming aware of the significance of the oral cavity for their general health, including preventing the severe progression of COVID-19.

This is boosting patients' confidence in their dental team, in their expert consultation skills and in their ability to perform prophylactic treatment. Among other things, hygiene standards are contributing to this. This is a classic core competence of the dental practice—though there are still things that can be improved. Based on current studies, optimising the holding technique for suction and a demand-oriented design of the suction system will further improve existing hygiene standards. Important decisions are made in particular when founding, taking over or expanding a dental practice. IDS 2021 will provide an overview of suction systems and suction tips, and visitors will be able to experience first-hand how the responsible design of their dental treatment facilities can provide the ideal hygienic conditions for the use of the entire range of instruments. This includes, in particular, high-speed turbines and powder–water jets used in prophylaxis.

A way to control the viscosity of a bulk fill composite from flowable to mouldable: thermo-viscous material for the entire Class I, II and V indication range (VisCalor bulk, VOCO). (Image: Koelnmesse/IDS Cologne/Thomas Klerx)

Filling treatments will become more customised, quicker and easier

In the future, patients in all areas are likely to attach greater importance to extremely high-quality restorations. For example, they will want restorations that are hygienic as well as increasingly highly aesthetic.

Direct restorations have been an outstanding and innovative field for years. Since they represent the bread and butter of the vast majority of practices, even minor advances in procedures and materials have a clearly positive impact.

The dental team works with a number of proven materials, including composites, compomers, glass ionomer cements and amalgam, still. Recently, composite hybrids have been added to this mix. The field of dental materials is becoming more differentiated, and so in a given clinical situation, a decision can be made in favour of different options. Patients come to the dental practice with specific wishes and set their preferences accordingly. In general, this list of preferences can be assumed to be (1) long-term stability; (2) compatibility; (3) preservation of as much natural tooth structure as possible; (4) natural aesthetics; and (5) favourable price. IDS 2021 allows a comparison of current filling materials in line with these criteria.

At the same time, the trends towards speeding up and simplifying the clinical procedures are continuing. The team can now work more quickly with many of the numerous self-adhesive composites. A comparison of the achievable adhesion values and marginal impermeabilities with the corresponding values of classic three-step etch and rinse systems as a reference shows how far their indication now extends.

Bulk fill composites can be applied in cavities in layers that are 4–5 mm thick, thus avoiding a time-consuming incremental technique. Flowable bulk fill composites are then overlaid with an occlusal filling material, and with specialist products, a change in consistency can be induced by sonic activation. For example, these are flowable when placed and become mouldable later. With this procedure, as with the high-viscosity bulk fill composites, a covering layer may be omitted.

The existing range of composites is further enriched by dual-polymerising and permanent composite relatives. Able to be used without retentive preparation and without etching, bonding or other conditioning, these materials allow for a tooth-coloured restoration and can be placed in the cavity quickly. However, a different technique is required.

At IDS 2021, new interfaces will turn various well-functioning partial workflows into a fluid, fully digital procedure from A to Z. (Image: Koelnmesse/IDS Cologne/Harald Fleissner)

Digital processes: Strong in specialist disciplines

In endodontics, the trend is increasingly towards conserving more natural tooth structure. The gradual improvement of nickel–titanium alloys for files has reached a level where innovative clinical concepts allowing for the conservation of tooth structure are now possible. At the same time, digitally supported endodontic backward planning is becoming established and, with it, new forms of collaborative working. For example, the dental practitioner can have specialists perform the digital planning (including files, obturation and an endodontic drilling template for the access cavity), but perform the subsequent treatment himself or herself.

Backward planning in implantology is already part of the standard repertoire, and new digital interfaces that allow for a truly integrated digital workflow will be presented at IDS 2021. Furthermore, the benefits of the use of artificial intelligence (AI) are already becoming tangible. It is hoped that AI will provide ever greater assistance in the evaluation of radiographic images and other visual representations.

Attendees will also be able to experience innovation in orthodontics. The classic means of checking for occlusal contact is now supplemented by digitally supported variants, and special bruxism splints can even provide immediate biofeedback and thus, ultimately, help prevent damage.

The sheer range of proven and innovative products, enabling patients to be treated using state-of-the-art technology, that will be on display at IDS 2021 is unique. Visitors to the trade fair will also develop a keen sense of how patients with their clearly increased interest in health in general and dental health in particular can best be persuaded to visit the dental practice. ◀◀

The growing localisation of trade fairs

An opinion piece by Björn Kempe.

We are almost in the fourth quarter of 2021 in the second year of the pandemic. What has changed so far in the German and international exhibition market worldwide, and what are the prospects for the future? These are the questions I hear almost every week through my social media channels or from friends. My answer to this is relatively simple.

In the 18 months of the pandemic, almost nothing has changed in the trade show market. The only thing that has changed—especially in Germany—is the urge to digitise faster. However, the first virtual and hybrid German trade shows have shown that one cannot make money with them so far, and only about 20–25% of attendees are excited about them. Additionally, an average of 30% of employees of trade fair companies have been cut, short-time work is still prevalent, and many highly qualified and long-serving employees have left the business for reorientation.

Apart from digitisation measures and staff cutbacks, nothing new has emerged in almost two years except for cancelled or postponed shows. Personally, I do not think this approach will be enough in the long run. Much more could have been done in 2020 and 2021. The trade fair industries in China, the UK and the US show that local concepts can work perfectly. People need trade fairs to network, get to know each other and, most importantly, do business. This was under-estimated in Germany.

Not only was the time span of the pandemic under-estimated but also its effect on customers. Many trade show organisers in Europe literally outbid each other at the end of 2020 and the beginning of 2021 for hybrid and virtual concepts. What is left is a virtual and hybrid exhibition market controlled by a few event technology companies, like Grip, Swapcard and Corussoft. Many exhibition companies even took the trouble to develop their own software and systems for a great deal of money—unfortunately almost certainly a bad investment. Event technology programmes are easily available off the shelf, and Messe München and Messe Düsseldorf are showing with Grip that it is very easy to use these without much programming and effort.

I would have liked to have seen every trade fair in Germany launching its own new concepts this year—local concepts that play a role for either the city or the region with a maximum radius of 500 km. Looking at the Chinese or US market, one can see that the local and regional component plays a much greater role than in Germany, which, for example, has only two medical technology trade fairs.

In the near future, I would like to see new trade shows coming on to the market—small and attractive. Organisers need to take a closer look at their city's industries and attendees' needs. It is clear that there will not be any decent big international trade shows until 2024. The speed of vaccination is too slow for that, and countries are too diverse to agree on global travel arrangements. Also 2022 will be a difficult year for our industry, as only vaccinated and recovered persons will have unrestricted access to events and only business-to-business travel will be allowed within Europe. In the past, Chinese pavilions took up over 30% of exhibition space at some trade shows, and other Asian countries and the US are very important trade show participants in Germany. This will probably not happen again until the end of 2023. Thus, optimistically speaking, the next "normal" trade fair year will commence in 2024. Until then, organisers should not let the time pass! Think local, create great trade fairs and don't invest too much money into digitisation and certainly not into your own programming.

About

Björn Kempe is the founder and CEO of Expos Asia, which is part of the EXPOS Global network, headquartered in Singapore. His consulting firm specialises in mergers and acquisitions, capital raising, investments, business development consulting and strategy consulting. Expos Asia also organises its own events in China and Indonesia.

The status of trade fairs in Germany

A look at the current environment.

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It is no secret that the 39th edition of the International Dental Show (IDS) will look vastly different to previous iterations. The record 160,095 international visitors that attended IDS 2019 will be greatly reduced owing to COVID-19 travel restrictions, though a hybrid approach will mean more people than ever will participate virtually rather than in person. Nevertheless, there remains a high level of demand for physical trade fairs to return and for Germany to re-establish itself as the international leader in this field.

Let's start with the good news. Presently, a majority of the German population has been fully vaccinated against COVID-19, significantly decreasing their likelihood of developing a symptomatic form of the disease. In addition, there exists an undeniable appetite for in-person trade fairs to return. A recent survey of its customers conducted by Messe Frankfurt, the world's largest trade fair organiser, found that 97% still saw the in-person component as an essential part of such events.

For those who do travel to Cologne for in-person participation, comprehensive hygiene protocols and sanitation measures will be in place to offer exhibitors and visitors a safe exhibition experience. The wearing of face masks is mandatory, and people with COVID-19 symptoms—coughing, sniffles, loss of smell or taste, fever, etc.—are not allowed to enter the exhibition grounds. In addition, Koelnmesse's #B-SAFE4business concept—which was demonstrated as a prototype before the press late last year—includes a comprehensive catalogue of protective hygiene measures designed to reduce the risk of SARS-CoV-2 transmission. Personalised tickets and contactless identity checks and bag searches at the entrances will be available, while trained personnel will be present to ensure that all hygiene regulations can be easily observed and followed at each exhibitor's booth. Visitors to IDS 2021 will also be required to install the eGuard mobile application, which is designed to guide visitors so that they can best avoid crowds and maintain appropriate social distancing.

Virtual participation a point of emphasis

Of course, travel restrictions and the limited availability of vaccines has meant that the Association of the German Dental Industry (VDDI) and Koelnmesse—the joint convenors of IDS—have had to make some key changes to how IDS 2021 can be experienced by those who cannot, or choose not to, attend in person. Chief among these is a hybrid approach powered by the free digital platform IDSconnect, which the organisers hope will make IDS 2021 a successful event online as well as offline.

"In tandem with the physical exhibition, IDSconnect will offer information on products and system solutions and will enable the streaming of webinars, press conferences, events and one-to-one conversations with clients," Markus Oster, business unit manager of trade fair management at Koelnmesse, told DTI earlier this year. "This will facilitate a consistent international reach combined with a successful trade fair experience."

The road to recovery

Five of the top ten highest-grossing trade fair companies are headquartered in Germany, and it is important to note just how severe the impact of the COVID-19 pandemic has been on this industry. According to the Association of the German Trade Fair Industry (AUMA), just 114 of the 355 trade fairs planned in Germany in 2020 were able to take place, and this year, the first in-person congress was only held in June.

The dearth of activity led to many leading trade fair facilitators suffering extensive financial losses, and AUMA stated that overall trade fair business in Germany fell by approximately 70% during 2020. Koelnmesse, for example, recorded a turnover of €94.3 million for the year—less than a quarter of the €413 million it generated in 2019. This, in turn, led the company to declare a net loss of €109.6 million for 2020, and it expects to incur sizeable losses once more in 2021.

Though IDS 2021 is expected to have around 830 companies from over 56 countries exhibiting, there are a number of notable absences that will undoubtedly be felt. Stalwarts, including Dentsply Sirona, Nobel Biocare and Ivoclar Vivadent, have elected not to participate this year. Walter Petersohn, chief commercial officer at Dentsply Sirona, explained that a major factor for his company's withdrawal was the lack of the "absolute planning certainty" needed to prepare for such a show.

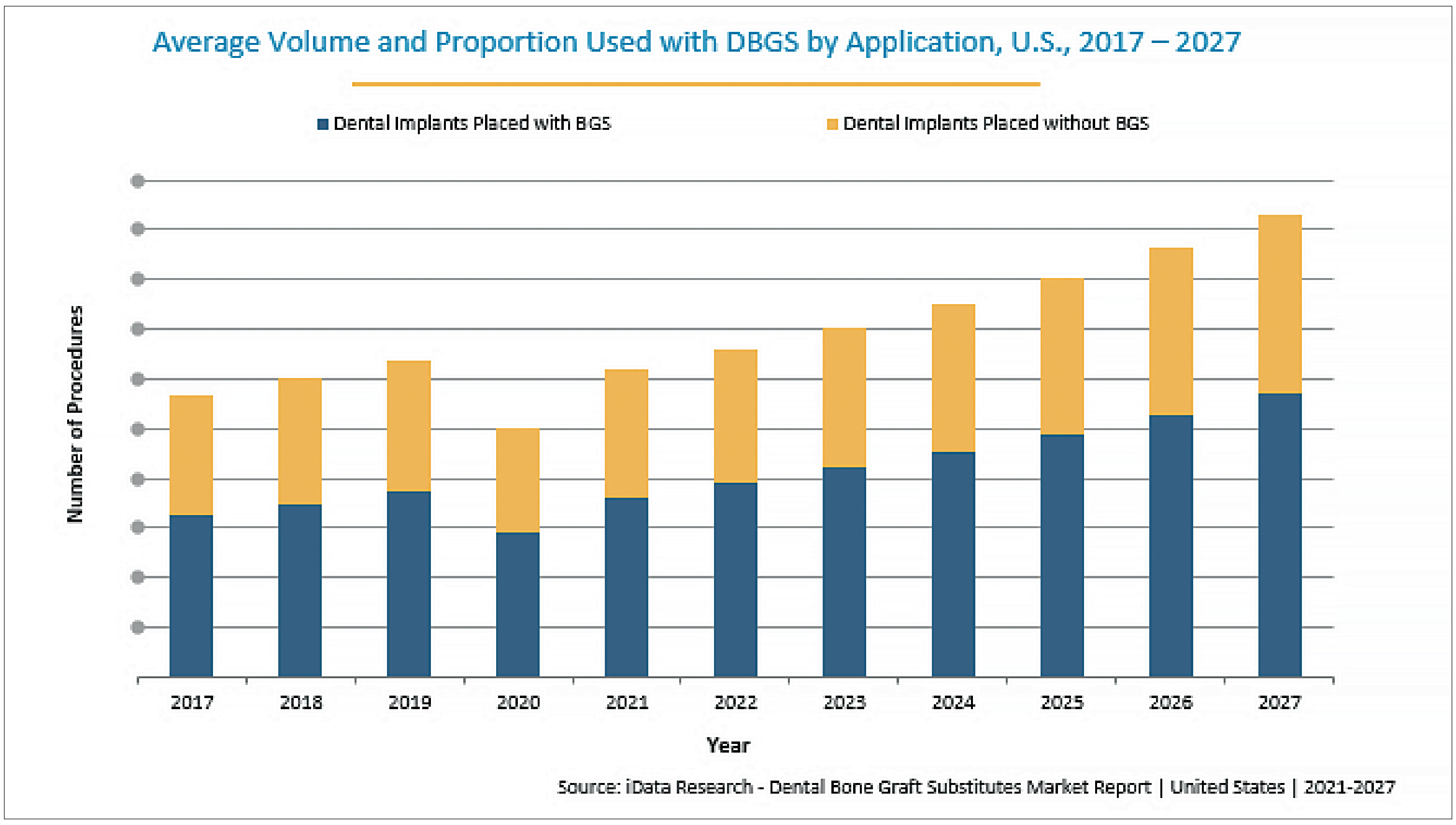
Regardless, there is a sense of optimism that surrounds IDS 2021 and what its success could mean for the future of trade fairs in Germany.

"Even if the first on-site trade fairs do not have the same dimensions and level of global internationality as in the past, the main thing is that we return to the scene as soon as possible," said Oliver Frese, chief operating officer at Koelnmesse, at a press conference in May.

"In recent months, we have been even more dedicated than ever to developing hybrid and digital trade show experiences all the way through to a year-round online presence for our trade fair brands," he added.

Top three trends influencing US dental bone grafting industry in 2021

US dental bone graft substitutes market size expected to reach $390 million in 2021.



The number of implants being placed with bone graft substitutes is increasing, and a growing body of evidence suggests that most dental implant procedures could benefit from a bone graft. (All images: iData Research)

Dental bone grafting has become an important and common step in the dental implant procedure. Advancements in allograft, xenograft and synthetic bone graft materials have positioned them as suitable alternatives to traditional autologous bone grafts, and this has created a thriving market for dental biomaterials. Although demand declined significantly in 2020 owing to the rippling economic effects of the COVID-19 pandemic, it is expected to recover quickly alongside the overall demand for dental implants.

Notable trends accelerating growth in this market include the increasing number of dental implant procedures performed. There is also a growing body of evidence suggesting that most (if not all) dental implant procedures could benefit from a bone graft.[1] Although the dental bone graft substitute (DBGS) market faces some minor headwinds in commoditisation effects and short-term pandemic-related constraints, the long-term outlook and secular growth trends remain positive.

Trend 1: Growth in implant market; stronger scientific support

The percentage of dental implants placed with DBGS in the US is forecast to grow from 58% in 2020 to over 60% in 2027, according to iData Research's new report on the US DBGS market. Because the two markets are closely related, the same growth trends that drive the demand for dental implants will also contribute to growth in sales of dental biomaterials. These trends include an aging population that is more prone to ailments like edentulism, a growing number of dentists trained in implant dentistry, improved consumer accessibility owing to industry consolidation, and stronger value propositions offered by shrewd pricing strategies.

In addition, there is growing clinical research suggesting that bone graft substitutes perform as well as autologous grafts with regard to bone formation, eliminating the need for costly and uncomfortable secondary grafting procedures.[2] This level of rigorous scientific documentation lends credence to manufacturers' own clinical trials and reinforces the value proposition of DBGS materials in implant dentistry.

Trend 2: Slowing innovation and bundling of DBGS

Innovations in bone grafting products are most often driven by advancements in the much larger orthopaedic market, before trickling down into dental applications. In recent years, innovation has slowed in both the orthopaedic and dental biomaterial markets, particularly with regard to bone graft substitutes, leaving little room for price growth and product differentiation. Furthermore, parts of the market are heavily fractured owing to hundreds of competitors offering similar products, which exerts downward pressure on prices and market value.

Put together, the two effects of commoditisation and bundling present a moderately bullish case for the DBGS market

Leading manufacturers have instead turned to leveraging their strong positions in the marketplace by employing bundling strategies to mutually reinforce demand for both dental implants and biomaterials. Because demand for dental biomaterials is largely driven by specialists, who typically order large volumes of dental implants in bulk, companies with strong brand recognition across the dental supply industry, like the Straumann Group, Zimmer Biomet and BioHorizons, have capitalised on this imbalance by bundling DBGS and implant products.

Put together, the two effects of commoditisation and bundling present a moderately bullish case for the DBGS market. Although competition and commoditisation can threaten stalled growth, strong players in the DBGS and adjacent markets will be rewarded if they are able to continue providing value to end users by offering attractive pricing strategies. The DBGS overall sales value is expected to have shrunk by nearly 21% in 2020 owing to the pandemic-induced economic downturn, followed by a sharp rebound of around 22% in 2021.

Trend 3: Innovation opportunities in barrier membranes and regenerative materials

While innovation in DBGS has slowed, there is no evidence of this for dental barrier membranes and dental growth factors. Over the next six years, both markets are projected to grow at an annualised rate of over 6%, following a sharp decline in 2020 and a complete recovery in 2021.

In the barrier membrane supply chain, market leader Osteogenics Biomedical has been consistently releasing new products with promising novel features. In 2019, the company released the RPM reinforced PTFE mesh, which was designed to work like a traditional titanium mesh but with a porous design that provides the added benefits of easier trimming and adaptation. In 2020, Osteogenics announced a distribution partnership with DBGS giant Geistlich Pharma, adding the mesh to Geistlich's expansive biomaterial portfolio. This move combines the brand recognition of two strong players in their respective markets to reinforce demand.

Currently, manufacturing of dental growth factors is led by four major players: Medtronic, Lynch Biologics, the Straumann Group and ACE Surgical. Each of these companies' regenerative products is indicated for a slightly different use, though they all generally originated as innovative products for orthopaedic applications. Dental growth factor production is still in its early stages of the industry life cycle, and the entire market stands to benefit from new product developments in the orthopaedic market. Furthermore, blood derivative growth factors such as platelet-rich fibrin (PRF) are seeing a rise in popularity. Notably, BioHorizons acquired Intra-Lock in 2018, stating in a press release that it was "excited to add the IntraSpin system to [its] portfolio since [PRF] is increasingly used in grafting procedures."[3] Although it is not yet clear that blood derivative growth factors are ready for prime time, an endorsement of PRF products by a major player is a good indication of the market trend.

The impact of COVID-19 on dental bone graft substitutes

The COVID-19 pandemic and subsequent forced business closures ground all dental implant procedures to a halt in early 2020. As dental clinics across the US began to reopen in the latter half of 2020, dentists reported a large volume of pent-up demand for implant (and therefore bone grafting) procedures, which is a promising indicator for a strong recovery.[4] Industry leaders remain confident in their respective companies' fundamentals and expect to recover pre-pandemic sales by the end of 2021 or early in 2022 before resuming previous growth targets.

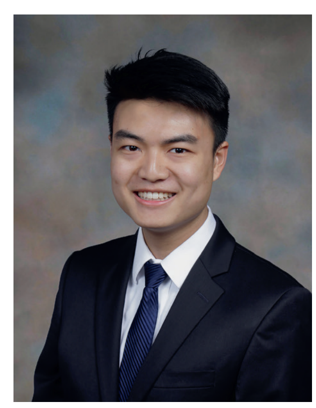
Demand is forecast to grow

Demand for dental biomaterials will continue to grow alongside the dental implant market for the foreseeable future in the US as well as in 21 other countries, as analysed by iData Research. Although some segments may be negatively impacted by slowed innovations and increased competitive pressures, the medium- and long-term growth trends remain positive. Major drivers of sales include growth in the related dental implant market, increases in supporting scientific literature, and innovations in dental regenerative products. Like the dental implant market, the DBGS and related biomaterial markets will make a strong recovery from the pandemic-induced market shock and continue a modest growth trend over the forecast period.

Editorial note: A list of references can be obtained from the publisher.

About the authors

Dr Kamran Zamanian is CEO and founding partner of iData Research. He has spent over 20 years working in the market research industry with a dedication to the study of dental implants, dental bone grafting substitutes, prosthetics, as well as other dental devices used in the health of patients all over the globe.



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About iData Research

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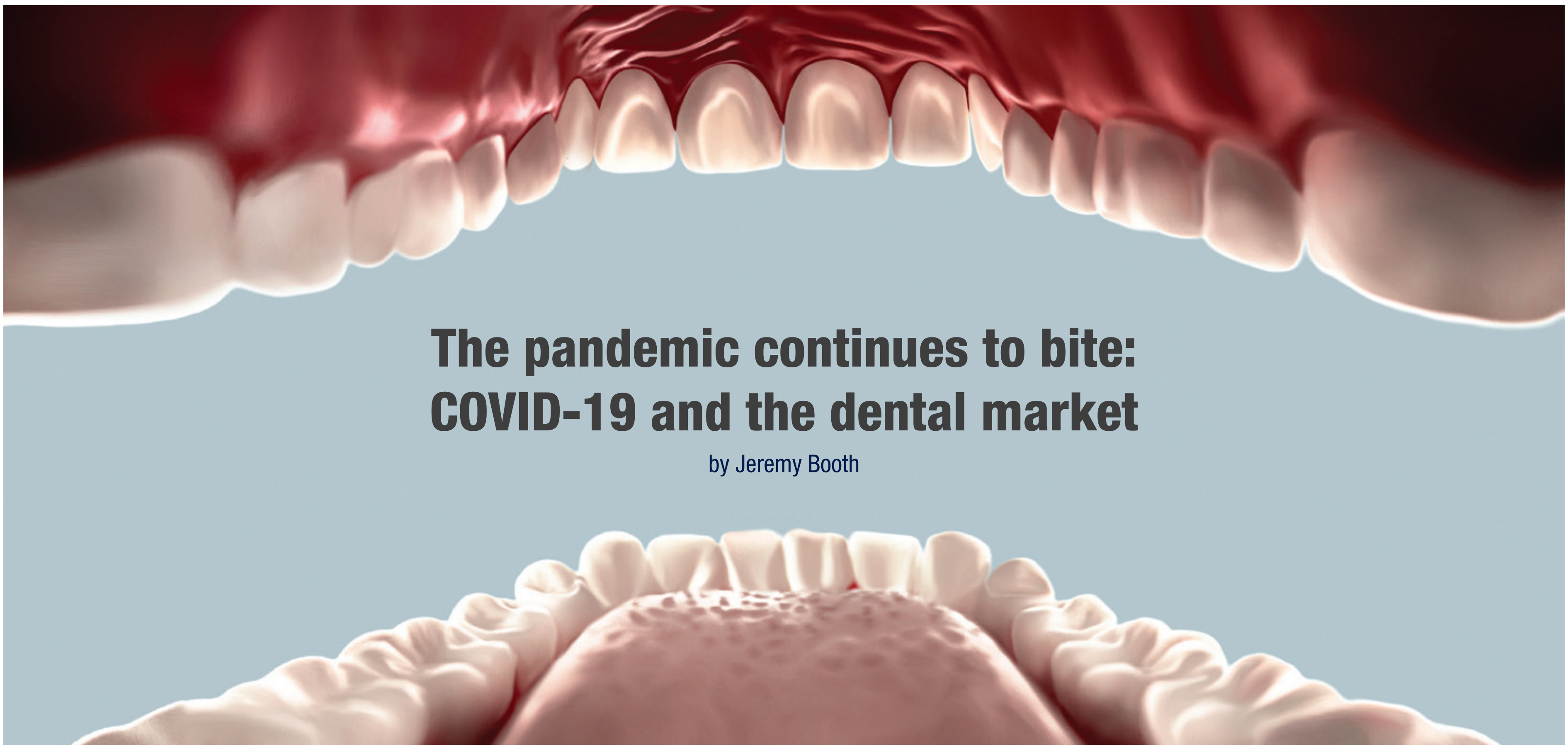

The pandemic continues to bite: COVID-19 and the dental market

by Jeremy Booth

The latest earnings reports from major dental companies show that dental offices around the world are open and doing business, but that the market has not yet returned to 2019 levels. (Image: Mirror-Images/Shutterstock.com)

■ Sales at major dental companies climbed in the second quarter of this year compared with the same period in 2020, during which the pandemic brought dentistry to a grinding halt. In the latest series of earnings reports, some dental company chiefs praised the recovery of the market, whereas others outlined falling discretionary spending, concerns about SARS-CoV-2 variants and sluggish vaccine rollouts in some geographic areas.

David Katzman, CEO of tele-orthodontics company SmileDirectClub (SDC), was candid when he spoke with analysts in August. SDC missed its earnings expectations for the quarter. Katzman pointed to SDC's newest international markets, Spain and Germany, where he said "lingering effects" of the COVID-19 pandemic had hampered earnings. He said that, at home in the US, the company's target demographic had been hit hard in the pocket by the health crisis.

He explained: "[Our] core demographic, which has a median household income of $68,000 (€58,000), likely experienced outsized pressures in their capacity to spend on discretionary items given the significant inflationary headwinds facing the non-discretionary categories like transportation, utilities and food."

SDC's target consumers, Katzman said, appeared to be favouring products over services owing to pent-up demand for apparel, automobiles and home-related goods. Joblessness was also having an impact. He explained: "Further contributing to the unfavourable condition of constrained capacity on spend on discretionary items and a general consumer preference for products over services, joblessness remains pervasive in four of our larger states, California, New York, Texas and Florida. Through 10 July 2021, these four states represent 40% of the nation's continuing jobless claims."

Total sales revenue at SDC for the quarter was $174.2 million, an increase of 62.7% year over year, and the company completed just over 90,000 unique aligner shipments, compared with 57,136 in the second quarter of last year. During the call with analysts, Katzman detailed the financial costs of a June cyber-attack on the company and praised growing acceptance of tele-orthodontics.

Align Technology posts $1 billion in sales

Staying with orthodontics, leading clear aligner maker Align Technology fared better than SDC during the quarter, as it continued to break its own earnings records. The company sold $841 million worth of clear aligner trays during the period—a year-over-year increase of 181.9%—and its imaging systems and CAD/CAM services revenue was $169.8 million, a 214.7% year-over-year increase. Total sales therefore topped $1 billion for the first time. Compared with the first quarter of this year, the company's clear aligner and imaging services revenue streams were up 11.6% and 20.0%, respectively. Clear aligner volume for the second quarter increased by 200.0% year over year to reach 665,600 cases, and clear aligner volume for teenagers increased by 156.3% to reach 181,000 cases.

A look at the company's regional figures shows that dentists in most regions provided Invisalign treatment to more patients in the second quarter of this year than they did in the quarterly periods before the pandemic. In the Americas region, case volume was up 260.7% year over year. International shipments were up 149.2%, and those in the Europe, Middle East and Africa region (EMEA) were up 265%, led by Iberia, the UK and Italy. In the Asia Pacific region, clear aligner volume increased by 50%, led by Japan, China, Australia and New Zealand.

Straumann remarks on improved patient volumes in 2021

The results of another international player, Straumann Group, will give readers an impression of the state of global dental markets. In the EMEA region, total sales of CHF 230 million (€212.7 million) represented a 102% year-over-year increase, which Straumann credited to sales of premium and challenger implant brands, its orthodontics business, and strong sales in Germany, Iberia, France, the UK and Turkey. Straumann's organic sales growth in North America decreased by 42% during the second quarter of 2020; this year, it increased by 135% to reach CHF 152 million. Sales in the Asia Pacific region rebounded by 63% in the period to reach CHF 103 million. In Latin America, where Brazil is the largest contributor to regional revenue, CHF 31 million in sales represented a year-over-year increase of 174.4%.

Straumann's total revenue for the second quarter was CHF 516 million. This represented a year-over-year increase of around 92%—in the comparable period last year, Straumann's total revenue of CHF 248 million was down nearly 40%.

Straumann published a half-yearly report at the close of the second quarter, and in the report, the company said that dental practices had been operating with "healthy patient flows throughout the first half of 2021".

Straumann CEO Guillaume Daniellot reminded analysts in a conference call: "When we held our last media conference three months ago, our industry was in lockdown. COVID-19 had cut our monthly revenue by 70%, and we were initiating measures to reduce our headcount and cost base in preparation for the economic recession that the pandemic is expected to trigger." He added that the situation on the day of the latest media conference (12 August 2021) was more positive. "With the exception of Latin America, which is still in the eye of the storm, all of our regions report that more than 85% of dental practices are open. Correspondingly, between 85% and 100% of our facilities are open and our sales team are operating at similar levels. In short, both we and our customers are back to business."

Envista optimistic about continued recovery

Sales at Envista Holdings in the second quarter were $740.1 million, an increase of 104.4% year over year. The close of the period marked four consecutive quarters of growth for Envista's premium implant business—which achieved 90% core sales growth in the three-month period ended 30 June.

Envista CEO Amir Aghdaei said during the company's earnings call that Envista had seen solid demand for its infection prevention business, owing to the fact that enhanced disinfection protocols are now the new normal. Aghdaei said: "We're excited about the opportunities for a new CaviWipes 2.0 product. It features a two-minute universal contact time, shows efficacy against a broad range of pathogens, including the COVID-19 virus, and increases our opportunity to penetrate the medical market further while enhancing our dental position."

Howard Yu, senior vice president and chief financial officer at the company, said: "While patient volumes have improved to pre-pandemic levels in our major markets, we continue to see inconsistent roll-outs of vaccines and spikes in COVID-19 variant infections in several geographic areas, including Western Europe and parts of the United States. Overall, we are mindful of the pandemic-related risks but remain optimistic for a continued recovery throughout the balance of 2021."

Aghdaei added: "While vaccination rates are increasing every day, we are mindful of the risk related to COVID-19 variance, continue to monitor reopening of economies and acknowledge that vaccination rollout worldwide [is] at different stages. However, we believe that patient demand will sustain at pre-pandemic levels, due to the industry's enhanced sanitation measures."

Envista owns more than 30 dental brands, including major names like KaVo Kerr, Nobel Biocare and Ormco.

Dentsply Sirona cautions over "ongoing impact"

Net sales at Dentsply Sirona for the second quarter were $1.067 billion, a 117.3% year-over-year increase. In the dental consumables segment, net sales of $445 million for the period represented a 138.0% increase. Sales of dental technology and equipment reached $622 million, a year-over-year gain of 104.6%.

US sales were $366 million, up 179.4% year over year, European sales of $431 million were up 99.5%, and sales in all other markets reached $270 million, an increase of 87.5%.

In a call with analysts, Jorge M. Gomez, executive vice president and chief financial officer at the company, commented: "Growth was strong across all regions and in all categories, most notably within the endo and [restorative] parts of our portfolio, which represent strategic priorities for our business."

CEO Donald M. Casey said that the dental market continues to recover and to demonstrate its underlying resilience, but that dentistry is not yet out of the woods. "The pandemic remains a key consideration for us as we evaluate our performance for the quarter and plan for the remainder of the year," he explained. "At this point, we feel the market is operating slightly below 2019 levels with a continued recovery expected for the remainder of the year. As we navigate through the newest phase of the pandemic, we are mindful that there [continues] to be some ongoing impact in certain regions and some stresses to the supply chain." ◂◂