Florida's Outlook On the Dental Laboratory Profession
1st Quarter 2016
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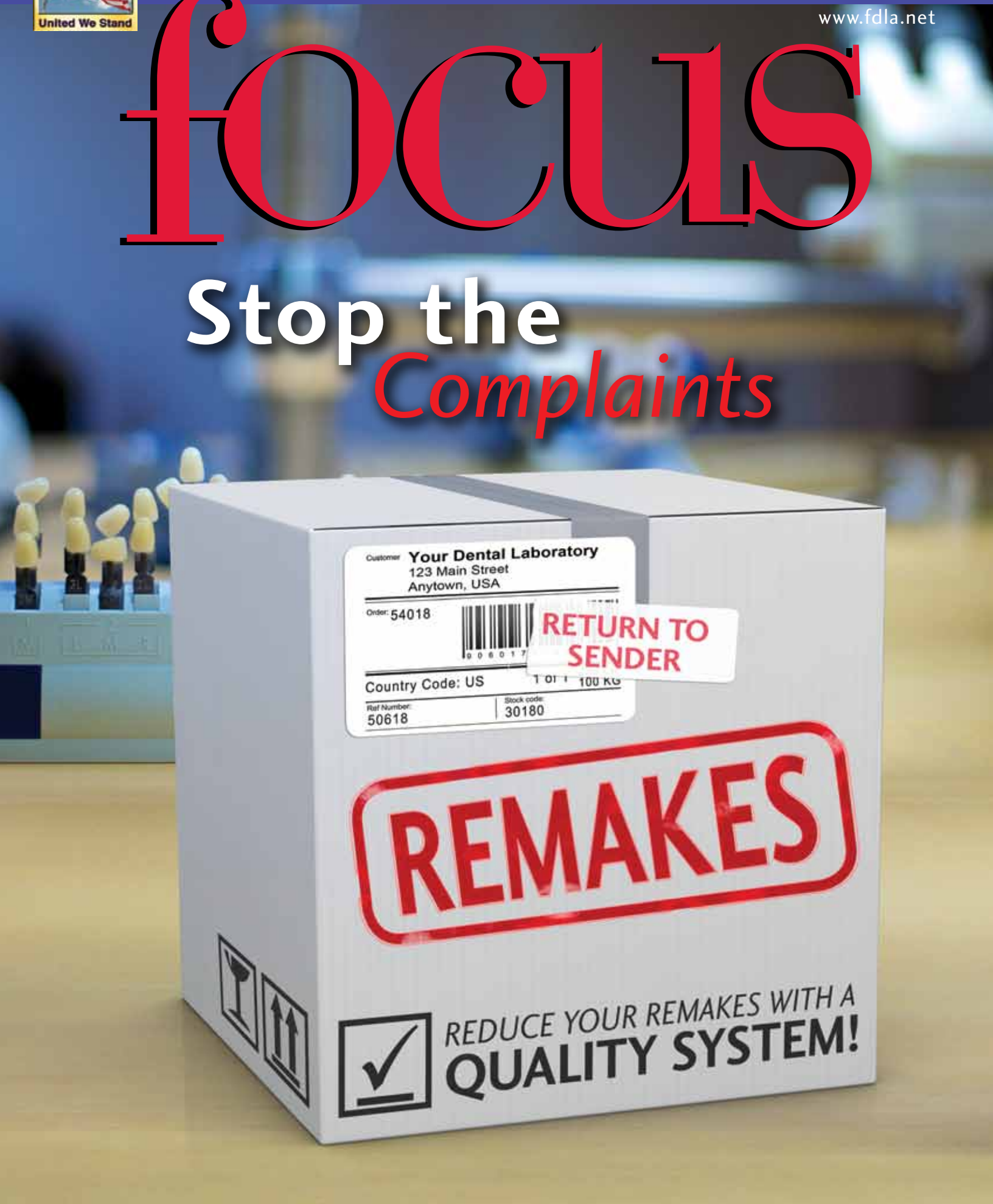

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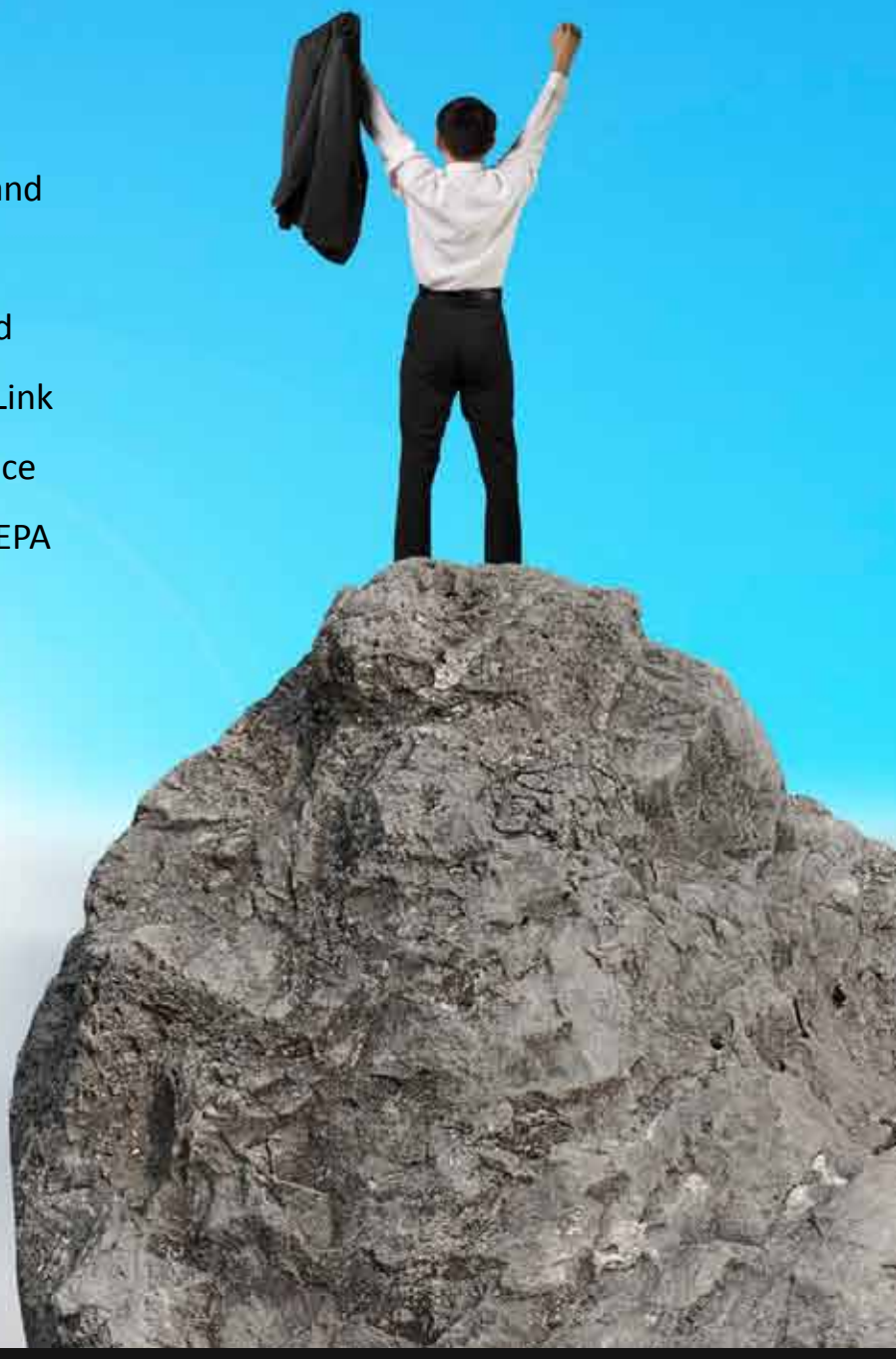

Adhering to an effective Quality System and Safety Program will ultimately aid your business in operating more efficiently and becoming more profitable. Contact SafeLink Consulting to learn more and for assistance with FDA , DAMAS, ISO, OSHA, HIPAA, & EPA compliance.

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"We appreciate the assistance we have received from SafeLink Consulting in helping us to understand the complexities of our regulatory systems. Beyond the effort of creating a comprehensive quality management system is the opportunity to work on overall efficiency within the organization and the peace of mind that comes with it." Udell Dental Lab, MN

Quality Matters

Quality Control is the most important step in a lab's daily routine. If you do not have a system in place, it could be detrimental to your lab, and the production of your company. Quality control, or QC, starts from the impression stage and should be continuous until the final restoration leaves the lab. The following steps are vital in excellent QC standards:

1. The model should be poured with no bubbles. Always check for good margins and occlusal clearance. Solid models are a necessity.
2. Once the restoration is designed and milled, double check that the frameworks are seated properly on the models and that the fit is good.
3. Once the technician has built and stained the porcelain, QC should go into action once again, to verify the technician has followed the prescription properly.
4. Take a look at the prescription again, and ask yourself the following questions:
   - Were all the dentist's requests followed?
   - Was the due date met on time?
5. For the final QC check before the restoration leaves the lab, make sure the restoration is seating properly on the working model. At this time, you will also want to check the shade, contour, and contacts on the solid model.
6. Finally, make sure the model is clean and steamed.

The most important step in the QC process is to read and re-read the prescription form. In almost every step listed above, reading and understanding the prescription plays one of the biggest roles in crafting the finest restoration. Communicating these details to your dentist and technicians will keep the consistency high with the standard of your lab. You will only have quality restorations if you have a QC system in place.

Save the Date

Don't forget to mark your calendar for the 2016 Southern States Symposium & Expo, May 5-7 at the Renaissance Orlando Resort at SeaWorld. The Symposium & Expo is the largest dental laboratory industry meeting in the country run by a nonprofit association. The educational sessions and expo will provide you with beneficial information on the latest trends and technology updates. FDLA offers CDT/RG, AGD and State of Florida approved credits, so you will earn continuing education credits for attending the courses held during the symposium. We look forward to seeing you there!

By Gail Perricone

GPS Dental Lab Inc.
FDLA president

FDLA Mission

Serving Florida's dental technology professionals as a valued part of the dental team enhancing oral health care.

FDLA Vision

Advancing the individual and collective success of Florida's dental technology professionals in a changing environment.

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FDLA's board of directors and professional staff are guided by these principles:

- Integrity
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- Recognition
- Safety
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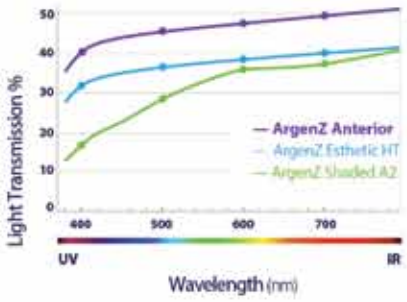

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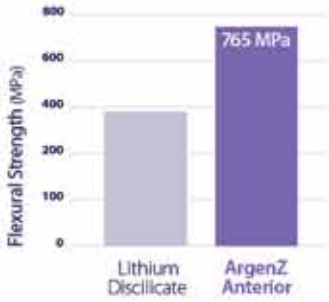

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Cloud Technology

By Khashi Rahmani

Jim and Michael Wright – EasyRx Co-Founders

Challenges and Insight from an ORTHODONTIC PERSPECTIVE

Like many small businesses, orthodontic labs and practices are often reluctant to embrace new technology. As with other industries, it's commonplace to believe techniques and methodologies that have been used so well are irreplaceable. Having come from a background in selling 3D printing and CAD (computer aided design) software, I can tell you that the old adage of sticking with the tried and true is not always best for the business long term. I've witnessed business owners shut their doors while competitors are exploring and adopting new technology. Although my scope of work dealt primarily with engineering and manufacturing clients, it's a lesson that orthodontic labs and practices can embrace.

One technology that has brought many successes across numerous industries has been cloud technology. This article will introduce a company that has leveraged cloud technology as a solution, the direct impact it is having on orthodontic labs and practices, and how 3D scanning and digital impressions are using cloud technology.

To better understand the value of technology and how it can positively impact orthodontics, let's look at the critical workflow process of managing prescriptions between practices and labs. Traditionally, this process is depicted by doodles from the practice doctors. It displays a patient's teeth on paper along with a volley of different parts and appliances that were sketched to represent what needed to be created by orthodontic technicians. Technicians constantly found themselves going back and forth with doctors to understand the configurations while doctors relied on carbon copies to attach with their impressions. The problems were obvious: Lab technicians were unable to read the drawings, billing departments struggled to code invoices with the correct parts, and hours were wasted on corrective communication.

This is similar to what engineering managers in manufacturing had to deal with for decades in terms of paper drawings, filing cabinets, and a slew of sketches clipped together for design projects. These manual practices require hours of clerical oversight and present a catastrophic risk should this information be lost. For manufacturing, solutions did materialize early on, but they were not to the liking of every business owner.

The emergence of 2D and 3D design software provided a digital and efficient alternative to the design process, however, their costs typically rendered

them out of reach for smaller businesses. Furthermore, computers storing and managing digital files, such as STL files, risked catastrophes like power and storage failures as well as tedious backup and recovery processes, which further deterred prospective adopters. Those that became early adopters of new design software were also faced with figuring how to convert years of existing physical designs over to their new digital workspace.

Cloud technology helped alleviate most of these fears and dug deep into many industries as the foundation for numerous business solutions. Cloud technology has technically existed since the 1950s, its physical application began in 1999 with the release of Salesforce.com. Since then, cloud-based platforms have introduced themselves to consumers and businesses by allowing data storage from any device, at any location, securely, and at an increasingly flexible cost. While this has presented a solution to general data storage and patient information applications for orthodontics, up until the late 2000s, it provided no streamlined solution for prescription management.

In 2009, Jim and Michael Wright took up this issue. This father and son duo, who for years have respectively been president and lab manager at Orthodent Laboratories, co-founded EasyRx—a cloud based digital prescription management software that bridges the digital gap between practices and labs. This was a massive development for orthodontics as no such software existed for this exact purpose.

"After years of dealing with carbon copies, our lab started investigating digital alternatives," said Michael Wright. "Not just for orthodontics, but dental as well. The software we did find was difficult to use, required desktop downloads, and forced our IT department to configure special permissions. Worst of all, almost all the user interfaces we tried were difficult to navigate. Frustrated with our results, we came up with the idea to provide practices and labs a platform where patient prescriptions can be created, managed, attached, and stored—all from a web-based browser. After some collaboration and software development, we showcased EasyRx to a handful of our well-known doctors and partner labs, many of which had also explored the same software we originally tested. The feedback we received were extraordinary and as a result, we made a large effort to take advantage of a cloud-based infrastructure. This included robust security protocols, industry compliance, secure data storage and backup, and most importantly making sure it's ultra-available for users."

Shortly after EasyRx launched, 3D scanning technology hit the mainstream orthodontic market. This posed an important challenge. Like most other applications, users were yearning to integrate new technology with existing infrastructure. Normally when a practice created an orthodontic prescription, they sent in a physical plaster impression, but with the introduction of 3D scanners and imaging, plaster impressions were becoming optional.

Digital STL files eliminated the messy and time-consuming plaster molds. Unfortunately, the management and sharing of these large digital STL files quickly became a challenge. Currently,

Cloud-based platforms, such as EasyRx, have paved the way for orthodontics to improve their existing processes.

Below:
A traditional orthodontic prescription sketch vs. a digital version.

Top Ten Benefits of CLOUD-BASED *Platforms*

1. **Flexibility** – Access from anywhere on most standard devices.
2. **Security** – Autonomous data backup and secured logins.
3. **Capital-Expenditure Free** – Eliminates need of high cost hardware.
4. **Increased Collaboration** – Sharing information/data in real time.
5. **Increased Accountability** – Track revisions, file edits, and increased visibility of workflow.
6. **Auto Updating** – Server side updates reduce productivity loss and are done without user interference.
7. **Environmentally Friendly** – Virtually paperless and only print-as-needed make sustainability easy.
8. **Scalable** – No software licensing and subscription options provide additional convenience to match business growth, most have pay-as-you-go models.
9. **Streamline Processes** – Cloud platforms are constantly evolving to integrate other business processes like accounting, sales, project management, etc.
10. **Increased Productivity** – Remote access allows quicker solutions to business and client issues.

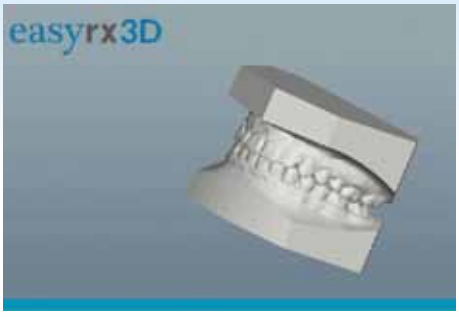
most transfers of scanned files when creating an orthodontic prescription are done through e-mail, third-party web portals, manufacturer's portals, FTP sites, or shared through well-known data storage apps like Dropbox.

"It may appear convenient, however practices and labs noticed that it added additional steps to retrieving the files, and subsequently, forced users to rig an in-house system to manage those files with their respective patients," said Michael Wright.

This was key feedback that he used to aim at making EasyRx a universal standard for prescription management, so they integrated complete digital file management, attaching, uploading, sharing and storing, into EasyRx. Additionally, EasyRx 3D was developed. This is a browser-based STL file viewer that allows users to view their scanned 3D files inside of EasyRx. One of his favorite enhancements was adding clinical notes to EasyRx, so labs and practices could centralize their communication securely. This helped users eliminate most external communication like back-and-forth emails and reducing practice-to-lab call volumes.

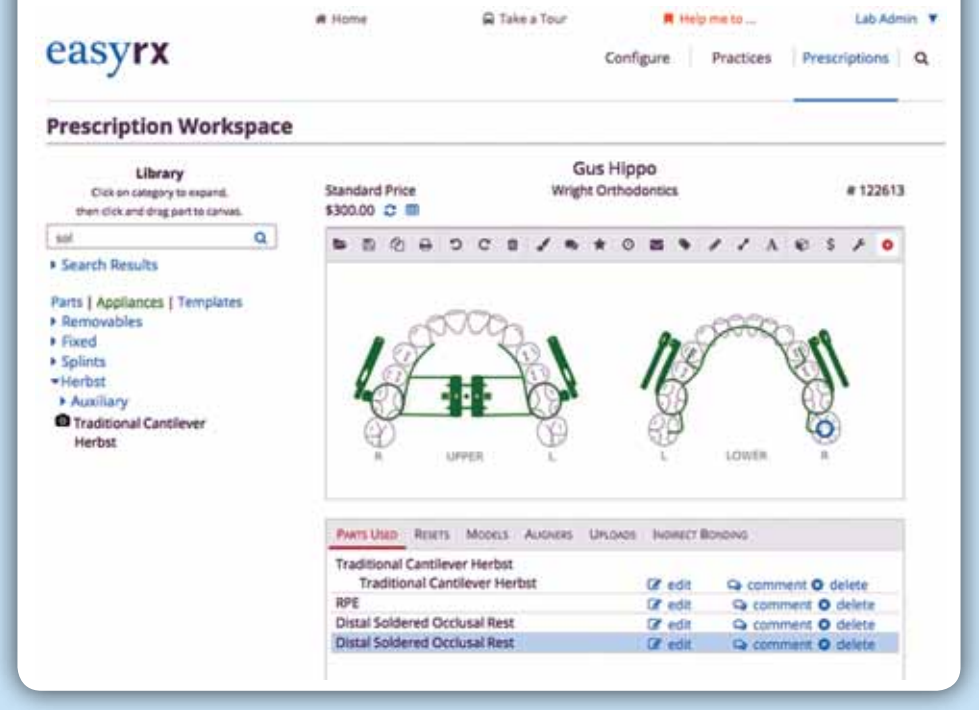
"One of the biggest questions we faced from clients when presenting our software idea in 2009 was 'How is this software going to help my clients?' A question that we asked ourselves when conceptualizing EasyRx," said Michael Wright.

To compare client benefits, one can look at the example the advantages of 3D scanning that produces faster office visits for patients, more concise and accurate data modeling, and an increased satisfaction in doctor-patient experiences. To draw a similar parallel in manufacturing, consider the excitement surrounding 3D printers to assist engineers with prototyping designs for new products. One of the main selling points of 3D printers has been the ability to create better design iterations at significantly quicker speeds. Some of the clients that purchased these printing solutions found their normal four-to-six-week process of obtaining a physical prototype reduced to less than one day, allowing their engineers to analyze and reduce product issues and optimize performance. The end results were better products for the consumer market, something that can be seen in dentistry as well.



EasyRx 3D, a browser-based STL (3D) file viewer.

A cloud-based digital prescription created in EasyRx.



The introduction of cloud-based platforms, such as EasyRx, have paved the way for orthodontics to improve their existing processes and replace antiquated workflows. Regardless of which industry you are in—manufacturing, orthodontics, dental, or any other—the path to success is quickest for those adaptive to change.

About the Author:

Khashi Rahmani is a business developer with EasyRx and has been in technical sales and marketing more than eight years working with various Fortune 500 clients. He graduated from Kennesaw State University in 2012 with his degree in psychology and dedicates his spare time volunteering for the Wounded Warrior Project. His passion is sharing knowledge of business technology and has six IT sales certifications from industry leaders such as Cisco, Dell, EMC, and VMware. He can be contacted at Khashi@easyrxortho.com.

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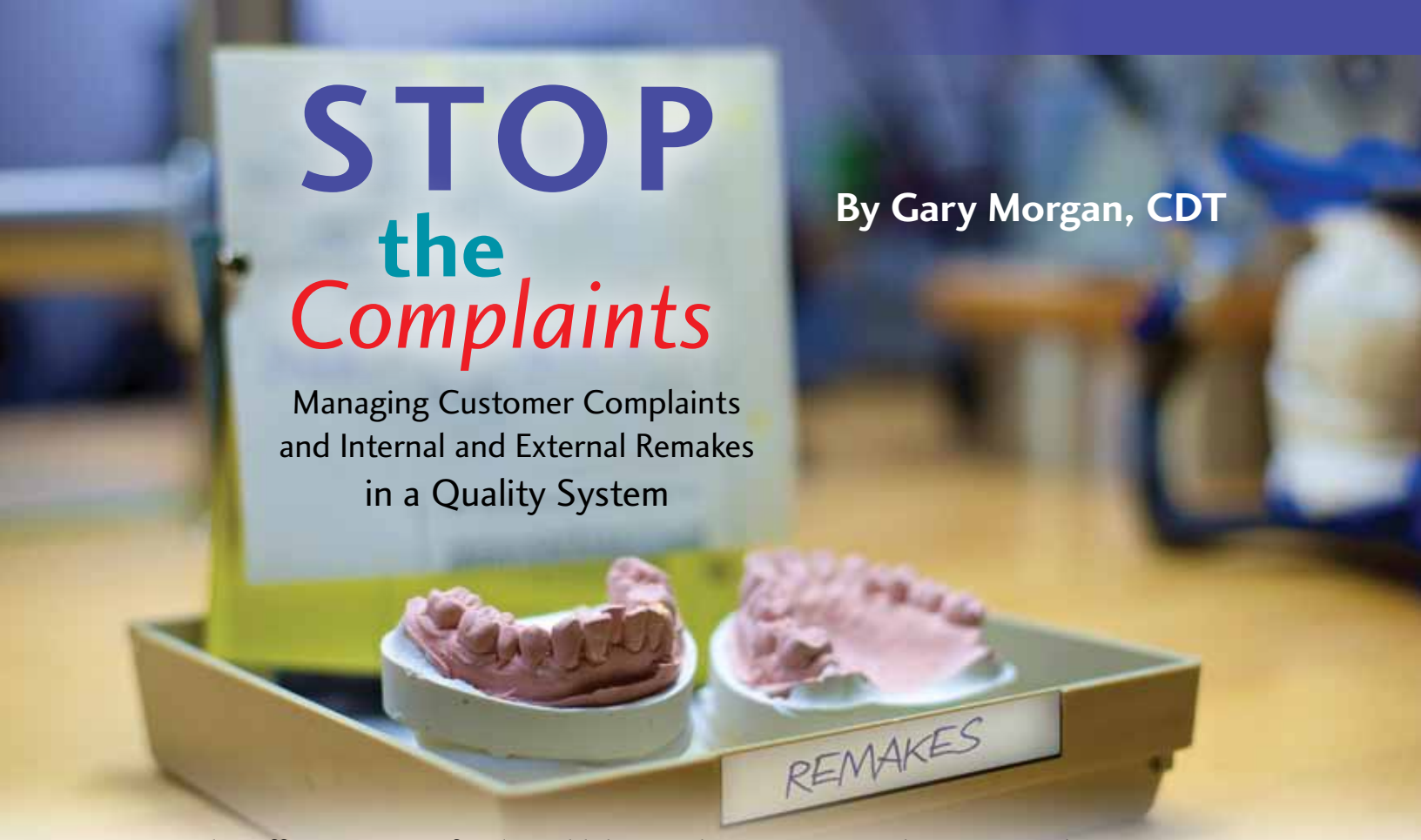
BE SOCIAL WITH US:

STOP the Complaints

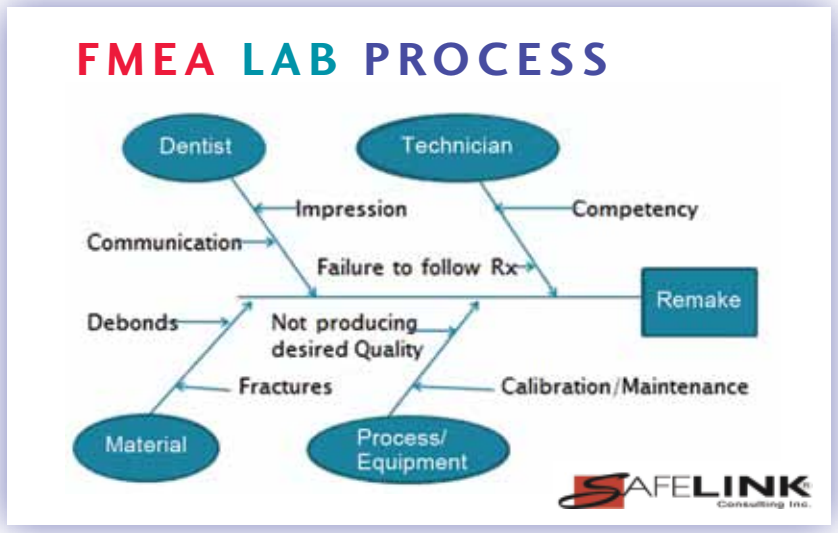
Managing Customer Complaints and Internal and External Remakes in a Quality System

By Gary Morgan, CDT



The effectiveness of a dental lab's quality system can be measured in many ways, but the two primary factors are in the reduction of customer complaints and the reduction of remakes, both internal and external.

Listening to your customer is extremely important to determine if they are happy or unhappy. Keeping a current customer happy is much easier and less costly than trying to gain a new one. Customer feedback provides the input for gauging how the lab is performing. It's great to have a dental client say we are doing a good job. It's not so great to hear one complain that you are not meeting their expectations, however, if you use a documented complaint management process as part of your quality system, then you have a tool to help achieve, maintain, or improve customer satisfaction.



What does the customer expect? This question must be asked in order to determine if and how you will meet their expectations. The standard answer to this question is quality products, but whose definition of quality is the right one? Answer: the customer's.

The customer wants the product on time, made as ordered, and right the first time. If you fail, then a complaint would be the likely outcome. How you react to the complaint will provide the dental client's input into the decision to stay with your customer or leave.

A good complaint management process should include the documentation of all customer complaints no matter the source of the complaint; phone calls, emails, feedback forms, notes on prescriptions, etc. Many of the case management software systems have the ability to log complaints

into the system and even document the investigation and resolution. If you do not have this capability, then tracking this information in an Excel spreadsheet can effectively do the same thing. Using this data, you can also analyze for trends which may be showing up in the feedback from your clients. The clarity of the information entered into the complaint log will make analyzing the data much easier and useful. You should limit the subjectivity allowed for the information input and focus on the objective information, so that the effect of emotions becomes less likely and the data is focused on the facts.

The immediate resolution of the complaint should be documented. This is what was done to make the client happy, not necessarily the reason that caused the complaint. So if the client states contacts have been light on all cases lately as the complaint, then the resolution might be ensuring that contacts are made tighter going forward. This would not indicate the root cause of the problem, which still needs to be investigated and determined as a part of the corrective action process. The corrective action should be developed from the determination of why the contacts are light, is it systemic with all contacts, contacts on a certain product, contacts from a particular technician, or just seem to be for the one specific client.

While complaints are bad, remakes are a huge drag on productivity and profitability of any dental laboratory. As important as complaint management, internal and external remake management plays a vital role in customer satisfaction and process improvement in the lab. For every case that has to be remade, unless you can charge for every remake, then there is a loss of profit. If the remake is for free, then there is no profit made on the case at all and in most cases, it is remade at a loss. Internal remakes likewise decrease productivity and profitability. It is far better to catch a problem earlier than later to lessen the negative effect.

Documenting internal and external remakes can provide valuable data as to what is contributing to the remakes. Again as in complaint management, using your case management software system's capabilities for tracking remakes correctly will ensure that you have the ability to track down why the remakes are occurring.

Proper input of remake reasons is critical for determining the cause of the remake. Reason and cause are different terms. The reason is why you are remaking the case, such as did not fit, fractured, did not look good, etc. The cause is what or who made the case not succeed, such as material failure, process failure, technician error, or client error. Here again, if the data entry is not correct, then the data output will provide little insight into the cause. Documenting the remakes correctly will allow you to compare like remakes to like remakes, apples to apples so to speak, since then the reporting can be created to look at trends in both internal and external remakes.

Internal tracking of production tasks and assignment of quality control checks will allow identification of where in the manufacturing process that a problem occurred, enabling you to find those problems earlier in the process and also to place accountability for the problem at a certain stage in production. The ability to find that point in time of occurrence helps in narrowing the investigation of the cause.

Creating all of this data is worthless unless you take the time to analyze the data to see how you are doing. Your case management software can usually provide reports based upon the input into the system and even sophisticated charts and graphs to help in the analysis. A visual representation through charting and graphing can provide a quick look at the information, but detailed reporting allows for the input necessary for root cause analysis if necessary.

Reviewing the reports and identifying trends then leads to investigation and determination of root cause, and if done properly elimination or great reduction in the negative effect of the trend on the business and customer satisfaction.

ROOT CAUSE ANALYSIS

MOST COMMON DENTIST COMPLAINTS

- Not following the dentist's instructions and preferences
- Product quality issues (fractures, contour, shade, fit, polish, esthetics, etc.)
- Inconsistent quality
- Material problems
- Turnaround times
- Late deliveries or lost deliveries
- Remakes and adjustments
- Warranty issues
- Communication with the lab
- Customer service issues, including pricing

The investigative process can be informal or very formal. It can be as complex as creating cause and effect charts and using failure modes and effects analysis, or it can be as simple as asking why five times. If you ask why five times, you can usually get to the root cause of the problem.

The need to perform the investigation is that without taking some action, then the problem will continue to occur and the negative effect will continue as well, leading to more remakes and lost productivity and profitability and the potential loss of a customer. Every lab should have a formal corrective action process in place for documenting the investigation and giving it the proper direction.

CORRECTIVE ACTIONS

Corrective actions are steps that are taken to eliminate the causes of existing nonconformities (customer complaints, remakes, nonconformance with stated company policies and procedures) in order to prevent recurrence. The corrective action process tries to make sure that existing nonconformities and potentially undesirable situations don't happen again. The corrective action/preventive action program is the company's written process for identifying non-conformances. It includes internal audits, investigating to determine root cause and implementing corrective actions to ensure conformance.

ACCORDING TO FDA REQUIREMENTS, THE PROCEDURES SHALL INCLUDE REQUIREMENTS FOR:

1. Analyzing processes, work operations, concessions, quality audit reports, quality records, service records, complaints, returned products and other sources of quality data to identify existing and potential causes of nonconforming product, or other quality problems. Appropriate statistical methodology shall be employed where necessary to detect recurring quality problems.
2. Investigating the cause of nonconformities relating to product, processes and the quality system.
3. Identifying the action needed to correct and prevent recurrence of nonconforming product and other quality problems.
4. Verifying or validating the corrective and preventive action to ensure that such action is effective and does not adversely affect the finished device.
5. Implementing and recording changes in methods and procedures needed to correct and prevent identified quality problems.
6. Ensuring that information related to quality problems or nonconforming product is disseminated to those directly responsible for assuring the quality of such product or the prevention of such problems.
7. Submitting relevant information on identified quality problems, as well as corrective and preventive actions, for management review.

The CAPA (Corrective Action/Preventive Action) form captures the investigation and is used to track the process, the individuals involved in the process, and the decisions as to the actions implemented to correct the problem. It should also document the verification of the effectiveness of the actions. You may not get it right the first time. You may need to try a different action to eliminate the cause.

Ultimately, the benefit in properly documenting customer complaints and internal and external remakes is that the identification of problems will allow focus to be placed on fixing those problems. An effective corrective action program can lead to the investigation and timely resolution of issues, which can lead to elimination of very detrimental effects on the business, including loss of customers, higher production costs, and lower profits.

It really is vital to the success of your business to take the time to create the data that can help you stay on top of customer service issues and product issues and the tools are right at your fingertips. Using the assets available in your management system can effectively tell you how you are performing. The old adage "you can't manage what you don't measure" may be true, but a more appropriate statement for a lab owner is "you can better manage with measurements you can see."

The smaller the lab, the more confident the owner may be that they know what is going on in the business, but having real data gives you real ownership and the ability to strive for continuous improvement no matter the size of the business.

ABOUT THE AUTHOR:

Gary Morgan, CDT, is the senior consultant and vice president with SafeLink Consulting, Inc. As an authorized DAMAS consultant and certification auditor, he has helped dental laboratories implement FDA compliant Quality Systems in their businesses. He is a certified quality auditor by the American Society for Quality.

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By Alan M. Jones

The Essential Tip for a Great Quality System: MANAGEMENT COMMITMENT

Ask most CEOs about their commitment to quality and the answer will almost certainly be in the positive.

Just as they have a commitment to protecting the environment, and to safety. Few would be brave or foolhardy enough to make statements to the contrary, such as…

"No, we firmly believe in providing a poor service."

"We are quite happy to kill or maim our employees."

"We poison the planet, and we're proud of it."

No, of course not. There is a strong commitment to quality. Look, it says so on the quality policy statement. The one on the wall in reception, signed five years ago by the CEO before last.

While the above may be a little facetious, it illustrates that in many cases, we don't have to scratch the surface very hard to reveal that commitment to be just a little thin. While there may be good intentions, an annual one-hour management review, and delegating the whole operation of a quality system to someone who already has a full-time job does not suggest genuine commitment.

So, what is? Well, let's start with the quality policy. This is the peak document of the quality system. It is like a declaration of intent or a mission statement. While the ISO standard has certain requirements for content, there is plenty of scope to achieve that while still reflecting the culture of the organization.

The policy should be reviewed at least annually, and updated as necessary. If there is a change of boss, it should also be reviewed then, and signed by the new boss. Most importantly, it should be shared with everyone in the organization. Everyone involved in the organization should at least know about it. There are plenty of no-cost or low-cost ways of achieving that e.g. including in company newsletters, intranet, web sites - even just talking about it at team meetings.

The quality policy should be supplemented by setting some strategic objectives that are consistent with the wider aims of the organization. In a commercial business, that may include the obvious—making a profit.

The management review should not just be a hurried exercise to comply with a standard. It should be a genuine business review and planning session.

Sure-fire evidence of commitment is when sufficient allocation of budget and resources is made for the system to achieve the goals stated in the policy statement. Now, that's the core of this particular issue—sufficient allocation of budget and resources. Developing a good and ever-improving quality system will take time and money. Some are just not willing to really commit to that. The perception might be that the alternative option of not investing in their quality system is a cost saving. However, there is no free alternative. The reality is that not having such a system takes up more time and money. It's just that we are used to the day-to-day inefficiencies, errors and omissions commonplace in most organizations. We just don't measure them, and they get lost in the mix.

If you are a CEO or senior manager, it's worth keeping an open mind on how a great management system can help your organization.

If you are the quality manager/compliance manager/quality champion in your business, you cannot just expect commitment from senior management. They will only really commit when convinced of the advantages. Such as:

- The positive benefit/cost ratio of a great quality system.
- Why you should have a genuine commitment to quality.
- Why you should want a great quality system in your organization.

Achieving that commitment is essential as any really successful system needs to be inspired and led from the top.

ABOUT THE AUTHOR:

Alan M. Jones is with Qudos Club, the online resource library for developing your quality/OHS/environmental management system with confidence—saving time and money. Includes quality, safety and environmental toolkits—packed with eBooks, training presentations, planning tools and a huge library of sample policies, procedures, forms, letters and other documents—ready for easy customizing to meet your business needs. Join at www.qudosclub.com.

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By Luke S. Kahng, CDT

Surface Texture

Matching the Single Central

The single maxillary central incisor is perhaps a dental technician's most demanding restoration. Color, translucency, internal characterization, surface texture and luster are all essential elements critical to its success. While recent innovations in ceramics have greatly improved our ability to match a tooth's natural color, translucency and characteristic, the accurate reproduction of surface texture and luster remains a mechanical task that requires keen observation, thoughtful planning and execution. Matching the adjacent teeth's surface texture and luster is as crucial to a restoration's successful integration as is matching color and characterization and should not be overlooked.

Figure 1 *(above)*
Shade mapping No. 9 with old porcelain-to-metal crown on No. 8.

Surface texture directly influences the value, color saturation and zones of light reflection and absorption. An anterior restoration that does not exhibit surface texture and luster comparable to the adjacent natural teeth will immediately appear out of place, particularly when the surface of the surrounding dentition is complex or heavily textured. The natural tooth's surface is composed of horizontal and vertical concavities and convexities that vary in complexity and intensity from tooth to tooth. Achieving the desired level of esthetics in restorations is rarely possible when these structures are not faithfully replicated.

Complex ceramic layering techniques may showcase the technician's skill level, but surface texture and luster showcase the restoration.

Figure 2 *(above)*
Preparation of No. 8.

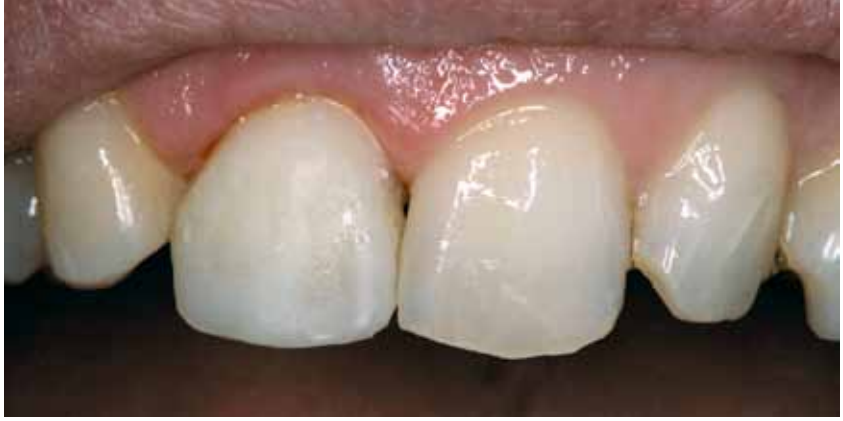


Figure 3 *(above)*
Temporary on No. 8 exhibiting the desired contour.

Case Presentation

A 41-year-old female patient presented with a 20-year-old porcelain-to-metal crown. Beyond the poor esthetics of the crown, the tooth exhibited recurrent decay and the surrounding soft tissue was inflamed. After reviewing the available treatment options, the patient opted for an all-ceramic replacement.

Upon returning to the office, the patient was anesthetized and the existing crown and underlying decay was removed. The tooth was re-prepared and a temporary crown made from Luxatemp Fluorescence (Zenith DMG) acrylic was fabricated.

After surface characterization was applied using the composite color modifiers (Kerr), the provisional was layered with a thin coat of light-cured glaze (Luxaglaze) to fix the color and characterization.

The tooth was then scaled with an ultrasonic scaler prior to cementation of the provisional with a carboxylate cement (Durelon, 3M Espe).

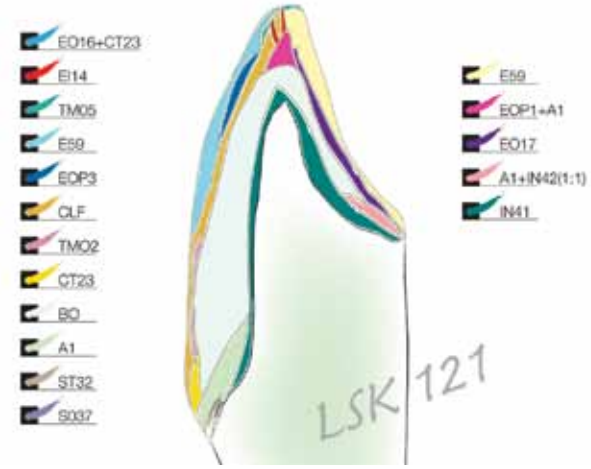


Figure 6.
Initial ZR (GC) porcelain color mapping for crown.

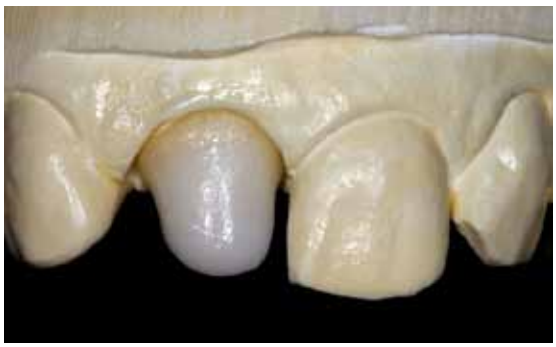
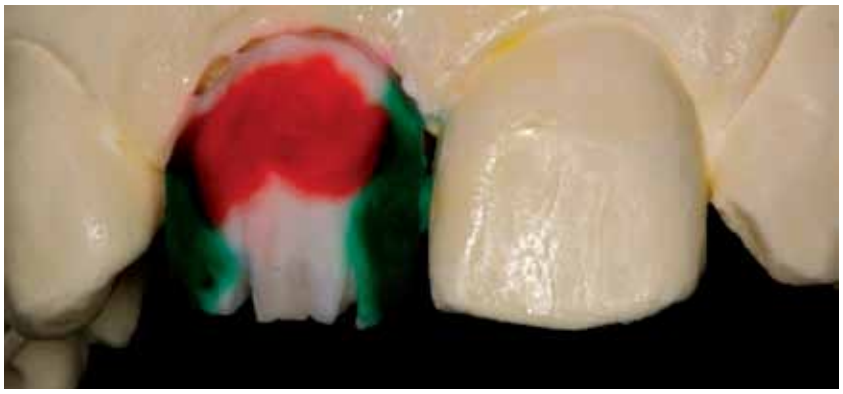


Figure 4 *(above)*
Zirconia coping (Procera) designed with a porcelain labial margin.

Figure 5 *(left)*
Porcelain labial margin adapted to the Zirconia coping (Procera).

Figure 7 *(left)*
Application of the dentin shade.

Figure 8 *(below)*
Colored enamels are placed on the mesial and distal. Cervical translucent orange color is applied to the cervical third.



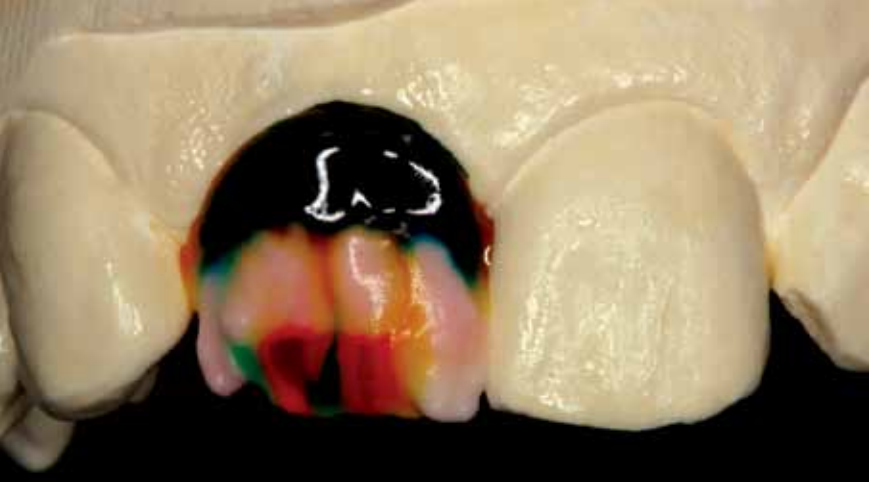


Figure 9 *(above)*
Various enamel colors are placed

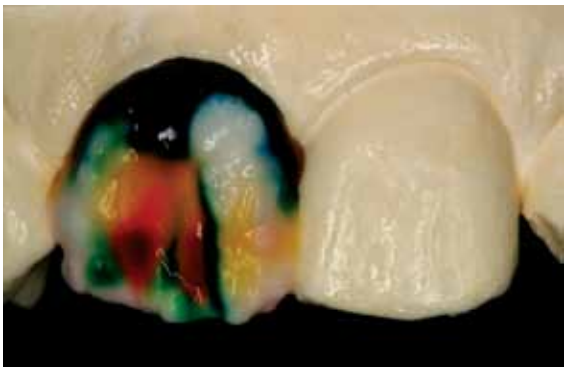


Figure 10 *(right)*
Enamel filter is applied over entire labial surface.

In order to achieve optimal gingival health for final impressions, the patient was sent home with a chlorohexidine solution (Oris Rx, Dentsply) and instructed to brush the affected area.

After three months, the tissue health was restored and impressions were taken (Xpasyl by Gunz for retraction, Clinician's Choice triple tray and Aquasil Decca with LV wash by Dentsply). Before releasing the patient, Polaroid images of the teeth were taken with various shade tabs in view and she was instructed to contact the lab for a custom shade appointment. After a bisque-bake of the crown was complete, the patient returned to the lab for shade verification and further characterization.

During the cementation appointment, the patient was anesthetized and the tooth was lightly air abraded. Simplicity was used to prepare the tooth while an etching gel (Ceretch, Vident), silane and Dentastic Uno adhesive (Pulpdent) were used to prepare the crown. After the excess composite cement was removed (P4 Flowable, Dentsply), the restoration was light cured,

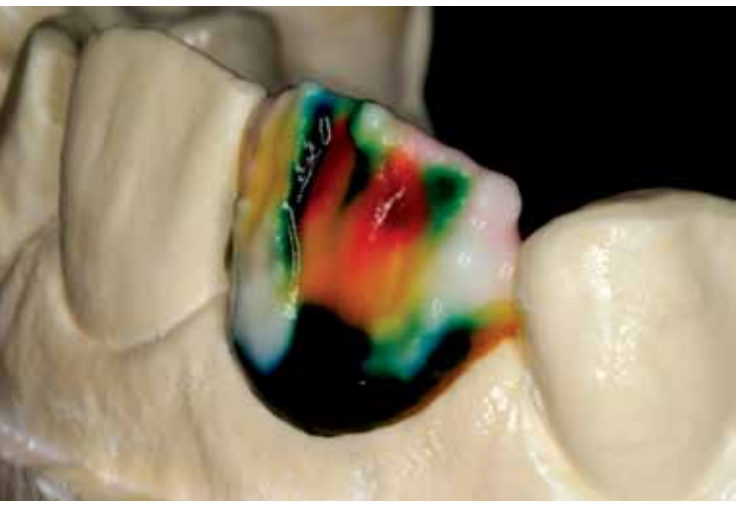


Figure 11 *(above)*
The enamel filter is 0.2mm thin.

Figure 12 *(above)*
The enamel filter will match the contour of the labial. translucent is applied.

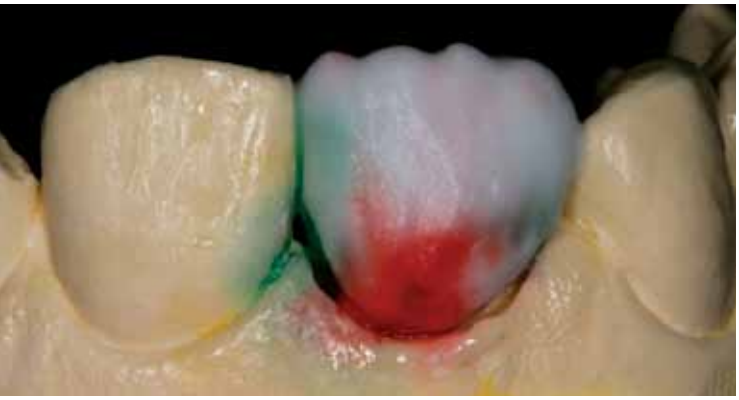


Figure 13 *(above)*
The enamel filter is completed and a modest amount of cervical

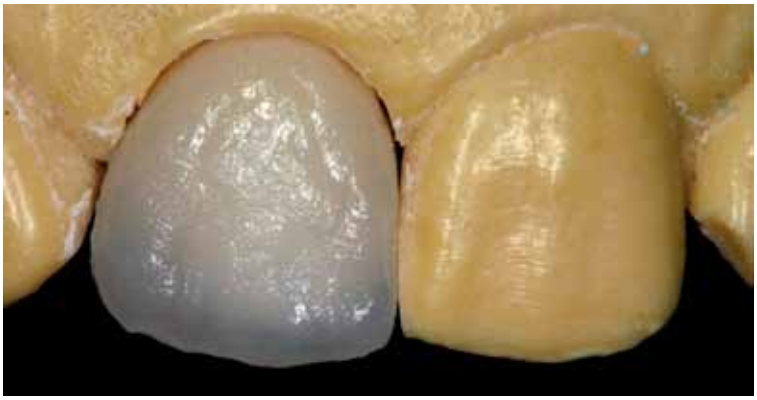


Figure 14 *(above)*
The bisque-bake firing.

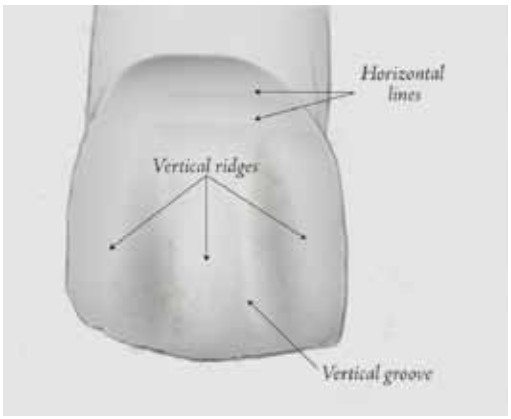
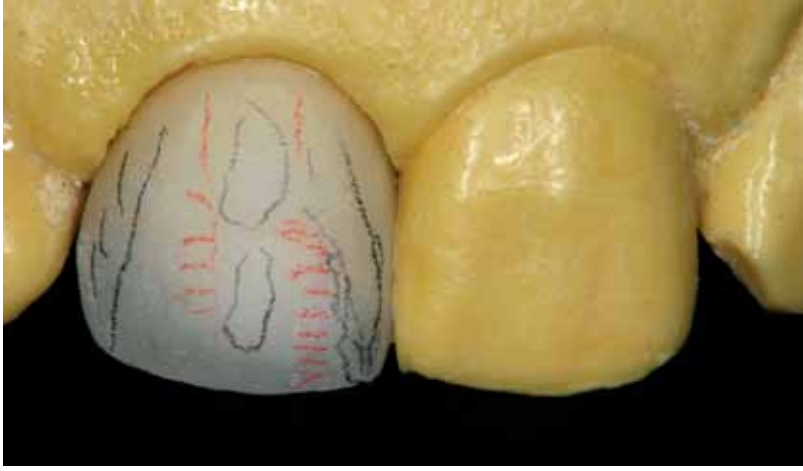


Figure 15 *(left)*
Mapping the surface texture of No. 9.

Figure 16 *(right)*
Surface-texture mapping transferred to No. 8.



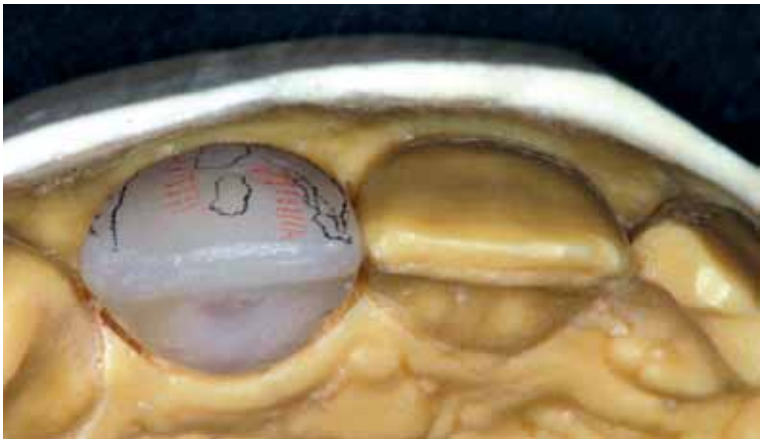


Figure 17 *(above)*
Incisal view of contour and surface topography.

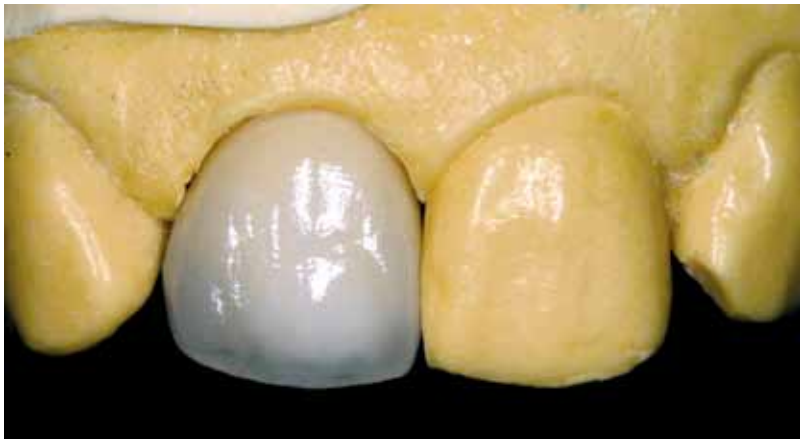


Figure 18 *(above)*
The crown is naturally glazed then mechanically polished.

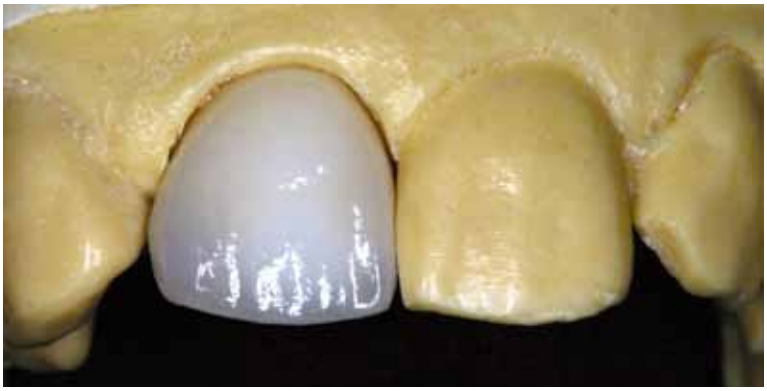


Figure 19 *(above)*
The texture of the incisal third after polishing.

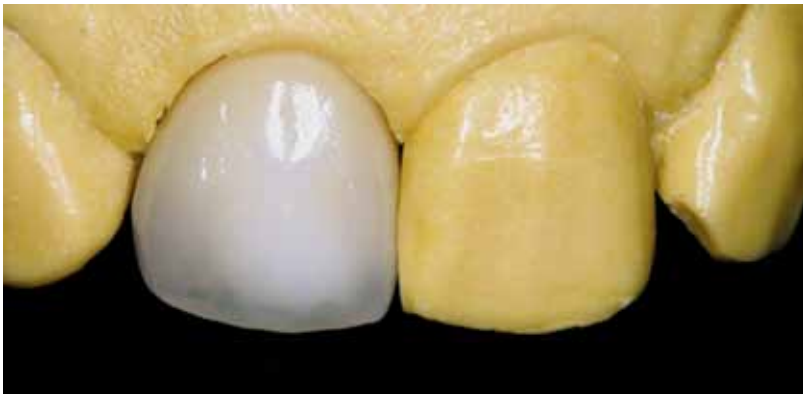


Figure 20 *(above)*
The texture of the cervical third after polishing.

Figure 21 *(above)*
Incisal view of contour and surface topography.

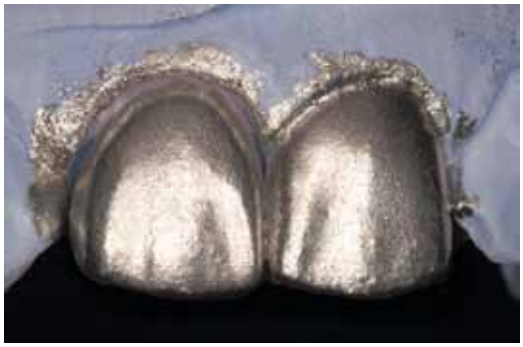


Figure 22 *(above)*
Silver powder makes surface texture evaluation easier.

Figure 23 *(above)*
Finished restoration.

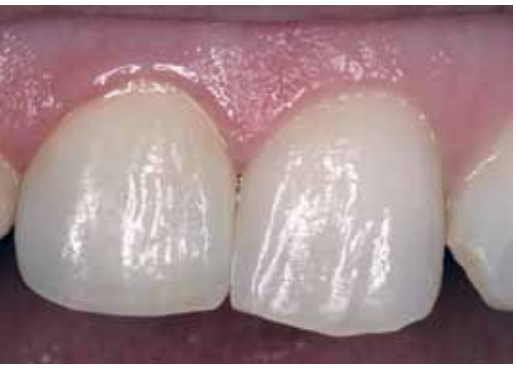


Figure 24 *(above)*
View after insertion. Note matching surface textures.

utilizing an Ultralume 5 (Ultradent). Any remaining cement remnants were removed using a sharp scaler and a trimming bur

(S.S. White #7901). The occlusion was then adjusted and the effected area was repolished with Axis polishing cups and points. A two-week post-operative visit revealed healthy tissue response, no sensitivity and a happy patient.

Figure 25 *(above)*
Lateral view illustrates segmentation of the color saturation.

Figure 26 *(above)*
The color, form and texture of the restoration are in harmony with the adjacent natural tooth.

Acknowledgement

The author thanks Dr. David Carlson and Russell DeVreugd, CDT, for sharing their knowledge and time.

References

1. DeVreugd, Russell. Anterior and Posterior Function and Esthetics, 1991, Vol. 1, p. 30.
2. Kapp, FR. "Esthetic Principles for Full Crown Restoration." J Esthet Dent, 1993, Vol. 5, pp. 25-28.
3. Kataoka, S. "Nature's Morphology." Chicago Quintessence, 1993.
4. McLaren, Edward A. "All-Ceramic Alternatives to Conventional Metal-Ceramic Restorations." Compend Contin Educ Dent, 1998, Vol. 19, pp. 307-325.
5. Sulikowski, Alan V. and Yoshida, Aki. QDT, 2003, pp. 10-16.
6. Yamamoto, M. "Metal Ceramics." Chicago Quintessence, 1982, pp. 416-423.

About the Author:

Luke S. Kahng, CDT, specializes in high-end ceramic restorations. He has served on several major dental journal boards as a contributing member. He invented the Chairside Shade Guide – Volumes 1 and 2 and then expanded the offering to a unique ceramic shade guide system named the Seasons of Life Selection. These valuable tools are used daily on a world-wide basis. He is owner and president of his own lab, LSK121 Oral Prosthetics, one of the largest dental laboratories in the country, located in Naperville, Ill.

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Mix Twice, Invest Once: The Duel Mix Technique

By Fernando deLeon

Throughout the years, we all have had difficulties getting accurate fitting metal bridge frameworks. The longer the span, the harder the fit. Then, when we add in the accuracy that is necessary for implant bridges, the task sometimes reaches the point of being incredibly hard to almost impossible. The frustration and anxiety that comes along with managing the fit of metal-ceramic bridgework is only outmatched by the potential for the lab to lose time, money, and worse, credibility with doctors.

Achieve precision fits with metal ceramic bridgework with the duel investing technique...

There are many factors that need to be controlled to achieve well-fitting and stable bridgework. These factors range from strict controls on the model work, waxing, investing, burn-out process and even casting. Many labs shy away from larger cases due to how frustrating achieving precision fits can be. Yet, with thoughtful consideration, it is highly possible to achieve consistent precision fits and become a great resource for your dentists on these important and complex cases. Yes, these cases have big risks, but if managed well, can have huge rewards for the patient, dentist and the lab.

For several years now, I have been very successful achieving precise fit on my bridgework frames. Of course, I focus on good waxing, burn out and casting techniques. However, one of the crucial points that needs to be highlighted is what I call a dual mix investing technique. After studying the behaviors of investing materials and metals—and learning about linear expansion that occurs when the investment is setting and throughout the burn out process, I began to work on and refine, the dual mix technique. This technique adds an extra step in the investing process, however, with it you will get the needed expansion within the bridge abutments to happen simultaneously while you're controlling the linear expansion that happens along the length of the bridge.

The Dual Mix Technique

After waxing by hand or digitally designing (Exocad) and printing an accurate wax pattern (BeCe cast, BEGO USA), you are now ready for investing (**Figure 1**).

As seen in **Figures 2 and 2 A,** I calculated the total liquid by measuring the weight of the power (Bellevest SH, BEGO USA) and calculated exactly the necessary total liquid (Aqua Spense SL, Whip Mix). Then, I used a vacuum mixer (Smart Mix, AG) and mixed the first bowl of investment with the ratio normally used for optimal fit in single units. While this mixture is mixing under vacuum, I mixed in a second bowl with a liquid ration having 20 percent less special liquid. The purpose of more water and less special liquid is to lower the linear expansion that could elongate the framework. When the first bowl was ready, the second bowl was placed in the mixer and mixed for one minute.

While the second bowl was mixing, the copings were filled (**Figures 3, 4 and 4A**). The standard mixture was used to fill up the inside of the copings and then the second, lower expansion mixture was utilized to fill up the rest of the ring (**Figure 5**). It is important that the first mixture is still relatively wet so that there is a secure blending of the two investments where they meet.

After this was done, the still moist ring was immediately placed in a pressure capsule (Wiropress, BEGO USA), which eliminates micro bubbles and assures dense investment with consistent expansion properties (**Figure 6**). After 10 minutes under pressure, the rings were bench set for an additional five minutes and placed in a hot furnace according to the manufacturer's recommendation (**Figure 7**). Lastly, I performed a melting and casting technique utilizing auto temperature recognition. Air and pressure instead of air and gas torch casting is preferable (Nautilus CC+, BEGO USA). This type of casting does not use centrifugal force so it eliminates turbulence that can create internal stress within the metal as it is cooling. In addition, it helps maintain proper metal physical properties.

As one can see from the accuracy of the fit of the pattern to the fit of the casted bridge (**Figure 8**), it is highly possible to achieve precision fits with metal ceramic bridgework with the duel investing technique as well as good model work, waxing and casting procedures.

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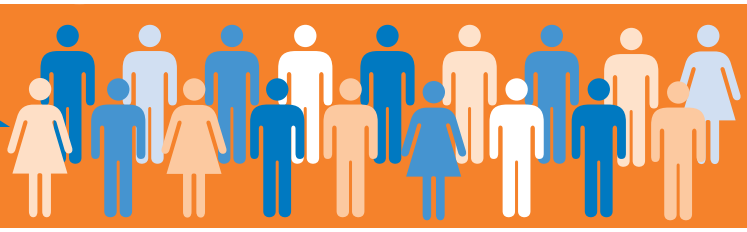
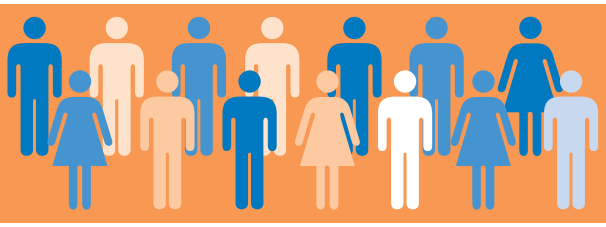
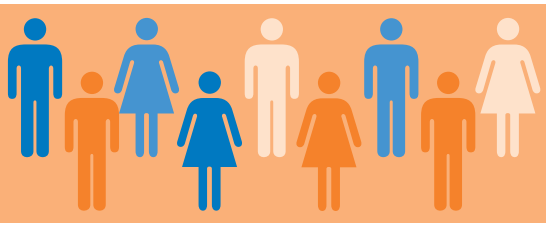
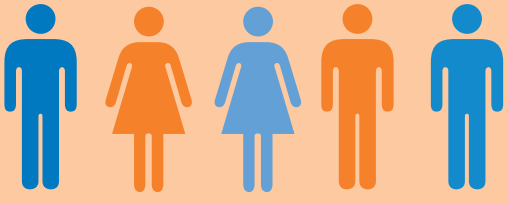
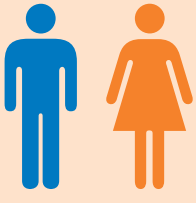
15+ Members		**$750** *Unlimited savings**
10-14 Members		**$535** *up to $110 savings**
6-9 Members		**$435** *up to $150 savings**
3-5 Members		**$335** *up to $90 savings**
1-2 Members		**$235** *up to $40 savings**

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BUSINESS SERVICES

(available to laboratory owners)

FDLA Insurance Services – FDLA is proud to offer special rates for laboratory members for Group & Individual Health & Dental, Disability Income, Employment Practices Liability (EPLI), Office overhead expense, Term Life & Long Term Care, Workers' Compensation, Pension & Retirement Plan, Fidelity Bond and Auto & Home Insurance.

Human Resource Hotline – The average dental laboratory does not have the workforce or means to hire a human resources manager. Even larger laboratories that have a human resources manager may need some advice on tough situations from time to time. FDLA members receive human resources telephone consultation services FREE OF CHARGE!

Credit Card Payment Processing – FDLA member laboratories are eligible to receive discounted rates on credit and debit card processing. Our provider specializes in creating card acceptance programs specifically for the dental industry.

COMMUNICATION

***focus* Magazine** – FDLA's quarterly *focus* Magazine is the most widely read state dental laboratory association publication. It provides updates on crucial industry information, new technology, laboratory management and other issues of vital concern. FDLA members receive a complimentary subscription as part of their membership.

Website – FDLA's Website, www.fdla.net, has comprehensive information on pertinent industry updates as well as conference registration forms, an online directory that enables dentists to look up FDLA member laboratories and other links.

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The Hub

FDLA Layering Techniques Workshops a Success

The recent One on One Layering Techniques with Initial LiSi and Lustre Paste workshops lead by Al Hodges, CDT, were a huge success. We want to thank GC America, Inc. for sponsoring the courses as well as 4Points Dental Designs, Inc. in St. Petersburg and Zahntechnique in Miami for hosting our members.

Classifieds

Rick Sonntag, RDT, AAACD

Recently, *focus* sat down with 4Points Dental Designs President Rick Sonntag, RDT, AAACD, to talk about the FDLA workshop he hosted at his St. Petersburg laboratory and his take on the dental laboratory industry in Florida.

You hosted an FDLA district workshop at your laboratory. Why volunteer your lab for it? What could other FDLA members gain from providing space for and attending the FDLA district workshops?

It's important to share knowledge and techniques these days and look for things that will set your lab apart. Al Hodges, CDT, shows how to go from run-of-the-mill insurance work to world-class, which is something everyone can learn from as our industry bifurcates into a two-tiered system. Hosting an event like this allows a lab to be part of the knowledge-sharing culture and help everyone who attends to elevate their work. Attendees from other labs at these seminars aren't your competition, they're future survivors.

What were the three biggest takeaways from the district workshop?

1. Anyone with the will and the drive can take the quality of their work beyond low-cost insurance work.

2. One needs a predictable system to differentiate themselves.

3. You don't need a 16-powder Geller buildup to achieve great results, if you're starting with a great porcelain system.

You've been a strong supporter of the dental laboratory profession in Florida for many years, what is unique about the state of the profession in the Sunshine State?

Florida has great leadership at the state level, the FDLA has been instrumental in bringing a level of professionalism to our industry not seen in many states. Registration and inspection by the board of health ensures that patients are being protected. The annual FDLA meeting is one of the largest in the country drawing many from out-of-state, a testament to the hard work of those involved in its leadership.

What is your favorite thing about being a dental technician?

Being part of a team that can restore a patient's confidence, self esteem, and regain the ability to simply chew and eat the foods they love.

What are the biggest challenges facing dental laboratories and dental laboratory technicians in Florida today and how can FDLA help members overcome them?

1. The corporate takeover of dentistry. Private equity-owned DMSO's (dental management service organizations) and labs will gut much of the mid-sized and mom-and-pop operations.

2. The lack of skilled labor. Those who do survive through 2017 and beyond will be competing for talent as well as accounts with large corporate labs. With no vocational training and limited formal training, skilled techs and knowledgable digital designers will be in short supply, which will hinder the growth of independent labs. A skills-based immigration policy would help small business like ours by allowing us to hire the best from around the world.

What do you think is the next game changer for dentistry?

A new generation of materials now in the FDA-clearing process will begin to appear in 2016, providing not only an alternative to zirconia and titanium in restorative implantology, but also changing the mind-set that simply having a higher MPa is the answer to all of our implant problems.

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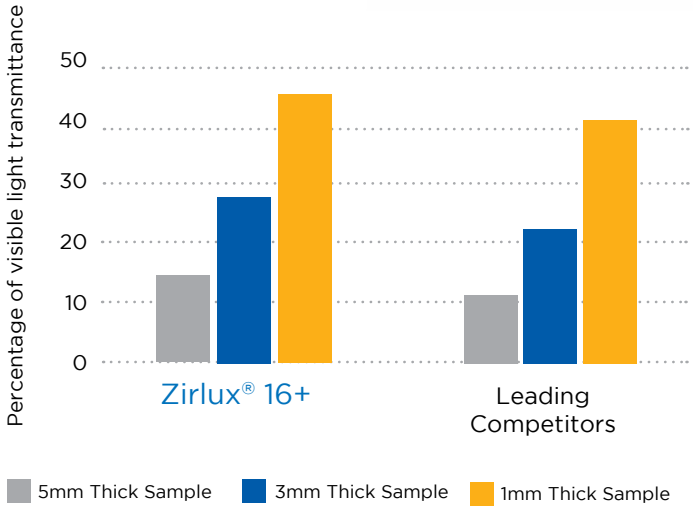

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