### tooth whitening





# Strategies for Practice Building Using Advanced Tooth Whitening

A Roundtable Discussion

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Since the introduction of nightguard vital bleaching (ie, tray bleaching) in 1989, dentistry has witnessed an astronomical rise in the interest in tooth whitening. The following roundtable discussion shares the insights of three renowned leaders in the industry on recent advances in whitening treatment as well as marketing strategies to promote whitening services in the dental practice.

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MECHANIC: One significant change is the manner in which clinicians prescreen, educate, and follow up whitening treatments. In the past, patients were given trays filled with whitening material and left on their own. Today, patients are screened prior to treatment to determine if they would be optimal candi-

dates for whitening. In addition, detailed instructions are provided for patients to ensure the best whitening results. This enables the patient to understand how whitening really works as well as how to properly execute the process.

**DELIPERI:** Manufacturers of take-home whitening systems combine the whitening gel with both desensitizing (potassium nitrate, and more recently, amorphous calcium phosphate) and remineralizing agents (fluoride). An increase in water content reduces dehydration and thermal sensitivity. The bleaching tray design has also been improved; nightguards had been previously made of thicker tray materials without reservoirs. Also, these trays were not scalloped and covered the gingival tissue, often resulting in gingival trauma and inflammation. In addition, strips and "paint-on" products have been introduced for take-home whitening.

Chemically activated hydrogen peroxide, syringe-to-syringe mixing systems are now available, offering the convenience of rapidly mixing the agent and activator chairside just prior to application, ensuring fresh gel for each application.

LEVIN: The evolution of early whitening products to the current options has given clinicians a tremendous level of flexibility; patients can then prioritize these options by cost and result. Many patients who begin with take-home whitening systems gradually progress to in-office treatment to achieve even more dramatic results.

Patient Education can significantly boost case acceptance for whitening and, ultimately, other cosmetic services. •

DC: Discuss any possible effects of hydrogen peroxide bleaching on dental restorative materials.

MECHANIC: Studies have shown that whitening causes mercury to rise to the surface of amalgam restorations. If whitening is performed followed by immediate placement of composite materials, adhesion may be compromised. At this time, however, I believe that there is no definitive conclusive research.

**DELIPERI:** The interaction of peroxide with restorative materials is of paramount importance. As mentioned, increased mercury release was reported following exposure of amalgam to carbamide and hydrogen peroxide solutions. In addition, another study demonstrated reduced microhardness of dental amalgam, compomers and resin-modified, glass-ionomer



FIGURE 1. Preoperative facial view demonstrates the marginal discoloration present on teeth #7(12) through #10(22).



FIGURE 2. Facial view shows the anterior teeth following completion of tooth bleaching.





FIGURE 3A AND 3B. Various take-home whitening treatments (ie, Perfecta Rev!, Premier Dental, Plymouth Meeting, PA) enable patients to whiten teeth with exceptional results.



FIGURE 4. A young patient presented with tooth discoloration of the maxillary dentition.



FIGURE 5. Postwhitening treatment (ie, Opalescence, Ultradent Products, South Jordan, UT) following five nights of bleaching demonstrated dramatically whiter appearance of the dentition.

cements as a result of urface oxidation caused by bleaching gel exposure.<sup>2</sup>

# DC: How does dentin hypersensitivity affect whitening treatment selection?

**DELIPERI:** Treatment of dentin hypersensitivity depends on its severity. The use of prescribed home-bleaching gels containing fluoride or potassium nitrate can dramatically reduce the incidence. Mild to moderate sensitivity may be controlled by simply reducing the concentration of the bleaching agent as well as the application time.

The prevention of tooth sensitivity begins with a detailed clinician anamnesis and appropriate treatment plan. The restoration of carious lesions as well as abfracted teeth is mandatory before initiating bleaching. Patients with abfraction lesions may experience moderate to severe tooth sensitivity when dentin is exposed. Clinicians may be required to change the superficial layer of the restoration if a mismatch occurs between the composite restoration and tooth structure following bleaching in the aesthetic zone. Enamel cracks may also be responsible for increased dentin sensitivity; in this case, the use of higher concentrations of both carbamide and hydrogen peroxide is not recommended as well as the association with heat and power bleaching agents.

**MECHANIC:** Prescreening is performed on our patients and fluoride treatments may be recommended on those patients we feel may be sensitive prior to whitening. For at-home treatments, patients can add fluoride to the whitening trays or whiten on alternate days.

### DC: Does your whitening protocol include at-home follow-up to maintain bleaching effects or is it preferable for the patient to return for an in-office follow-up?

**DELIPERI:** Both protocols are applicable as a follow-up to tooth whitening. Protocol selection depends largely on the bleaching technique adopted. It is critical to inform patients, however, about tooth shade rebound and the need for retouching.

**MECHANIC:** Every patient who has undergone in-office whitening in our office automatically receives a take-home kit. This enables patients to maintain whitening effects; they are then followed up in our office a few weeks following treatment.

# DE: Describe tooth-whitening marketing initiatives employed in your practice to increase growth potential.

MECHANIC: Our office offers a free consultation and smile evaluation. We've also reduced our prices on tooth whitening so the procedure is accessible for more patients. In addition, home-whitening trays are included for patients beginning restorative treatment to ensure an optimal shade when the treatment is completed. Single-syringe kits are also provided for touch-ups, so the patients will return to the office for additional kits.

**DELIPERI:** The comfortable, painless procedure enables patients to enhance their smile—an incentive for patients to pursue future restorative treatment. Manufacturers of whitening products also provide posters, waiting room brochures, postcards, and videos with targeted messages to promote patient interest in professional whitening that should be strategically placed in the waiting room, operatory, and reception desk. I also provide my patients with a CD containing before and after photographs of their smile.

**LEVIN:** Patient education—both male and female—can significantly boost case acceptance for whitening and, ultimately, other cosmetic services. This education should include a level of motivation and excitement along with a general factual overview. Regular e-mail updates about no-charge consultations to patients, friends, and family can also be considered. While there are many other marketing techniques, one of the best is simply to use the personal relationship established by the clinician to educate and motivate patients about the benefits of a brighter, whiter smile.

### REFERENCES

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