

The Power of Dr. Zhivago's 3D-Printed Provisionals

Thanks to 3D printing, Dr. Zhivago's practice provides increased customization, efficiency, and peace of mind.

Dr. Paul Zhivago understands the value his patients place on time and convenience. So when he founded DOWNTOWNDENTAL in Westfield, NJ, he prioritized creating aesthetic and implant workflows that offered increased customization and efficiency.

In a traditional dental workflow, personalization and speed are often at odds with each other, so Dr. Zhivago turned to 3D printing to achieve his clinical goals. "Now, I can't even imagine trying to practice without a 3D printer," he says.

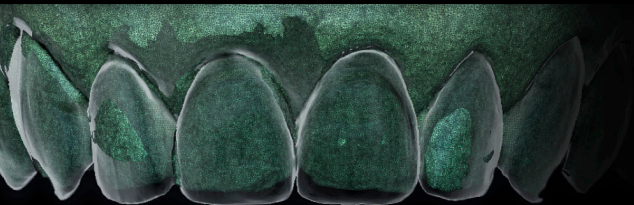
One of the biggest uses of 3D printing for DOWNTOWNDENTAL is creating temporaries for aesthetic restorations. "The patient comes in for an aesthetic evaluation that includes clinical pictures, an intraoral scan, and a full-face scan to capture their features," Dr. Zhivago says. After their digital information has been captured, a digital mockup is designed using information provided by the patient.

"Because I have a 3D printer in my office, I can offer my patients a next-day appointment to evaluate the results of our smile design," Dr. Zhivago says. At this follow-up appointment, the patient gets to see not only the digitally-designed smile, but also a 3D printed cast. This printed cast is used to transfer the design into the patient's mouth to further evaluate if the new smile is to their liking.

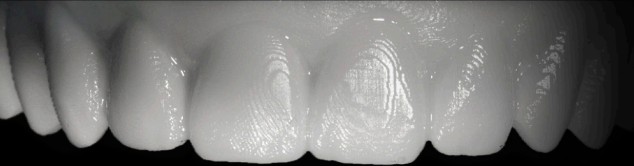
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Digital Design



Print



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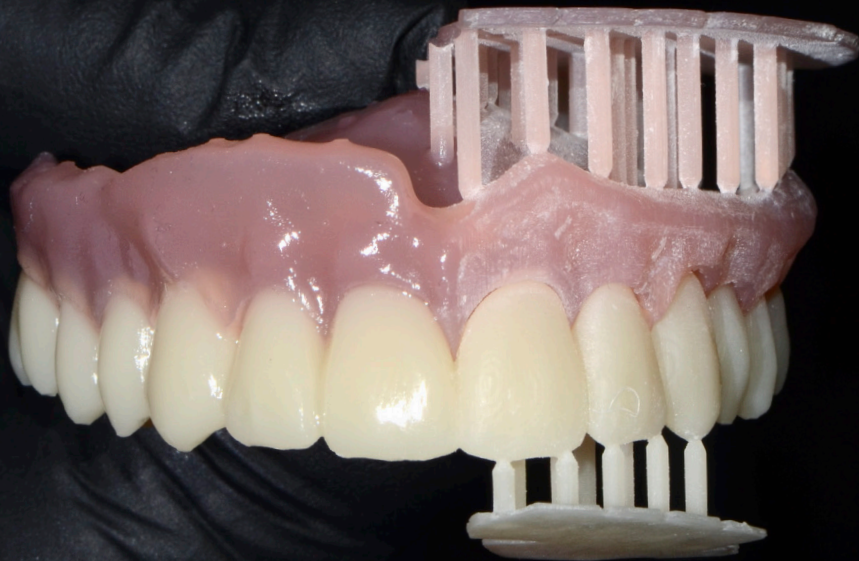
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Provisional replacement with 3D printing

Thanks to the speed of 3D printing and CAD software, changes can be made without having to wait for offsite manufacturing. “If the patient isn’t totally satisfied, the design can be easily modified and rapidly reprinted same- or next-day,” Dr. Zhivago says.

Once the design is approved, the printed model is used to communicate the design to the laboratory for final work. “3D printing allows me to keep multiple spare temporaries ready to go in case anything happens,” Dr. Zhivago says. “When it does, I don’t have to spend time on repairs; I just replace them.”

The ability to print multiple temporaries for a negligible cost is key for Dr. Zhivago’s patients, many of whom travel frequently or visit his office from overseas. “Providing my patients multiple spare provisionals is huge. In the case of breakage or loss, the spares can be inserted or replaced by any practitioner in an emergency situation without any need for modification,” Dr. Zhivago says. His patients know that wherever they are in the world, Dr. Zhivago has them covered.



This level of convenience and customization didn’t exist before 3D printing. Since printing a set of provisionals only costs a few dollars in materials and can be done in less than an hour, Dr. Zhivago can provide a unique level of service. It doesn’t hurt his bottom line, either. “By being able to do this all in-house, my production cost is dramatically decreased,” Dr. Zhivago says. Now, rather than waiting weeks and spending hundreds on lab bills for fabrication, both patient and doctor get a better value.

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Dr. Zhivago DDS

Dr. Zhivago uses his 3D printer for more than just aesthetic restorations. “We use the printer for many applications,” he says. “Implant surgical guides, splints, and even removable traditional prostheses.” And, as he becomes more experienced with 3D printing, the number of uses continues to expand.

Of course, not all 3D printers are capable of keeping up with Dr. Zhivago's demanding production schedule and wide breadth of treatment options. “I'm glad that I chose the MoonRay 3D printer due to its openness and large variety of printing materials,” he said. “Now I'm also the proud owner of a SprintRay Pro, which makes my printing workflows even faster and more efficient.”



About Dr. Paul Zhivago

Dr. Paul Zhivago received his Doctor of Dental Surgery from New York University College of Dentistry where he also completed his education as a prosthodontist. He then trained at Columbia University's College of Dental Medicine as a surgical and implant

fellow. He is a board-certified prosthodontist specialized in esthetic, restorative, and implant dentistry. He lectures nationally and internationally on the topic of digital dentistry and is the founder of DOWNTOWNDENTAL in Westfield, NJ.