

Beyond The Bench

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July Topic: Impressing the Importance of Accurate Impressions, Part II.

Evaluating the quality of the impressions we receive from doctors is essential to ensuring our laboratory's productivity and profitability, because they directly affect our ability to satisfy expectations for the fit, form and function of restorations the first time, every time. When impressions arrive that are less than desirable, costly and time-consuming remakes can occur. When this happens, the impact is felt not only in terms of hours of labor, but subsequently on the laboratory's bottom line, overall productivity, and its reputation.

You Need the Right Stuff

The ability of an impression material to support multiple pourings with consistent accuracy is important. At our laboratory, the impressions we receive are the basis for three models: a solid model that we use to ensure that our contacts are precise and the restorations seat with the same insertion access as the doctor; a die model that enables us to move the restorations around; and a working model. So, we're asking a lot from a doctor's impressions.

To emphasize the importance of the impression material to our doctors, I often remind them that our goal is to enable them to seat a restoration quickly, without adjustments. Once the doctor has the crown and the patient is in the chair, they should be able to verify that the occlusion, shape, shade, and fit are right on the money—which should only take 15 minutes or less of their time. From there, they should be mixing their cement and placing the restoration.

If we've based the restorations on an accurate model created from a precise and quality impression, then we know we've saved the doctor time because we've verified contacts and the insertion angle prior to sending them the restoration. As I've mentioned before in other columns, when you make the doctor look good, you and your laboratory look great, and your reputation is golden.

For this reason, we recommend that our doctors use a quality polyvinyl impression material (Virtual, Ivoclar Vivadent, Amherst, NY). We advise them to use a heavy body tray material that is accurate, and a wash material that is sufficiently thin to capture every nook and cranny, yet won't tear easily. Remember, you're going to be pouring the impression several times. I've found that this is something that Virtual allows us to do very well, and I've even tested this in my own laboratory.

Get Attracted to Opposites

Another thing we always ask for is a really good impression of the opposing arch, but doctors will typically use alginate for this purpose. However, we prefer that they take a polyvinyl impression of the opposing arch, using the wash material on the occlusals of every tooth and the heavy body everywhere else.

The idea is that we want to ensure that the bite is accurate and that we've grinded all of the teeth correctly. Particularly for a complex case, we'll fabricate a couple of the opposing teeth because, as you know, porcelain is abrasive and, due to the wear and tear that takes place in a laboratory, the restorations can get beat up. Therefore, at the very end of the fabrication process, we use the opposing model that's been mounted but not touched, put it back on the articulator, and perform a final occlusal check.

Sometimes we'll catch a cusp tip that's broken off slightly or has become slightly rounded because of the normal laboratory processes. While this isn't a big deal on the articulator, if the restoration were seated in the mouth, your doctor would be playing "Columbo" to try and figure out exactly where it's hitting. With a quality polyvinyl impression of the opposing arch, we can perform this final check, and we really can't do this if the doctor sends us an alginate. What's more, if the alginate breaks in the mail, we then have to deal with gluing it back together, which leaves us with an element of risk.

Benefiting from Better Impressions

When your laboratory becomes so expert in helping the doctor take better impressions, and therefore the laboratory obtain more accurate models, what does it mean in terms of your productivity and profitability? Well, imagine that you cut your re-makes down to 1% or less. Typically, let's say that you charge \$100 per crown, as a simplified example, and you have a \$20 profit margin. This means is that it costs your laboratory \$80 to make the crown. To break even again, you'd have to make 4 crowns. If you think of it that way, for every unit that you don't have to re-make, you're really 5 crowns ahead.

Many times I hear laboratories complain that there's a particular doctor for whom they'd like to avoid doing work because of all of the re-makes but, in the end, they don't because the doctor represents a \$10,000 per month account that pays the bills. So, I'll ask how many crowns the doctor does, and the answer will be about 100 crowns per month. Then, I'll ask about how many re-makes the laboratory has per month, and the answer will be about 10 crowns, which is 10%. My response is that this particular account isn't paying the laboratory's bills but, rather, creating them!

But let's talk about internal re-makes. Your impressions arrive, you make your models, and you identify the problems after the models are made, rather than when the impressions arrive—when you could have made a phone call to discuss the problem with the doctor. Well, a decent model technician is going to cost you at least \$15 to \$20 per hour. So, if at the die trim process you catch the fact that the impression wasn't any good, you've already wasted \$20, rather than make that initial phone call. As you can see from this example, saving the time and labor associated with internal re-makes is very beneficial to a laboratory's productivity and profitability.

Conclusion

When you consistently save your doctors from problematic situations that could arise from less-than-accurate impressions, you prove each and every day the reasons why they can't afford to go anywhere else for their restorations. You build a sense of teamwork with the doctor, and the value-added services you provide become the basis for charging higher fees that account for the level of problem-solving skills you provide.