

Dr. Bobby Birdi - Does it Make Financial Sense to Introduce Digital Technologies into GP Practice?

Dr. O'Keefe: On Friday, May the 10th Dr. Bobby Birdi, a certified prosthodontist and periodontist from Vancouver, will be giving two presentations at the Ontario Dental Association Annual Spring Meeting in Toronto. The title of his afternoon presentation is Digital Dentistry and Technology in Today's Implant Practice. In order to give you a foretaste of the content in that presentation and his style of presentation, I am going to ask Dr. Birdi a question that's coming from a viewer that's pertinent to that presentation. Bobby, here's the question that a viewer has sent us: does it make financial sense to introduce digital impression or 3D printing and milling technology into GP practice today?

Dr. Birdi: You know, John, you know, I think it's a great question. I think one of the biggest things about today in dentistry in terms of dental practice and just technology, it's pretty daunting as a practitioner, it doesn't matter whether you're a specialist or a general dentist and it can be difficult to understand or decide, well, you know, can I put all this money into different types of technology and is it worth investing the money or not? In our practice, we're lucky to have all these types of modalities in our office. And I can tell you that a lot of times initially the initial investment seems like, okay, well I've got to spend the money and especially the time, which a lot of times is worth more than the actual money you spend up front. But after that part is done, the benefits of the technology you're going to implement it or not just about saving costs, but it's also about being able to provide better treatment, have more technology at your fingertips, and also being able to really just, you know, attain more information over time, never lose information.

Dr. Birdi: And there's lots that we can do now with intraoral scanning and also with 3D printing and milling or not only as a dental office are we going to be a data acquisition practitioner, but we also can output, we can also now decide to make things and design things as well. And that's pretty fantastic. So, I think for sure it makes financial sense. Every practitioner is going to be a bit different and you don't have to adopt all the technology right away. You can start off with some iOS scanning of digital impressioning, which I think is, speaks for itself now at this point in the industry. And then maybe the next step isn't to buy a really expensive mill but buying a printer which can be fairly pretty inexpensive and can really kind of cool technology having in practice but also something that can really help you on a day-to-day basis.

Dr. Birdi: So, I've got a whole bunch of slides here quickly to kind of look at some of the points and really just showcase things in general. And you know, let's take a look at those and we can talk about it.

Dr. O'Keefe: Sure. Let's go.

Dr. Birdi: So, John, you can see on this first slide, you know, we're trying to compare the benefits of digital impressioning versus analog impressions. And you can imagine as the practitioner, you can be taking impressions for a very long time. You're quick, your staff is very quick at it. And I'm not going to lie to you, the initial investment is monetary, but then it's also time investment. But this is kind of some of the pros and cons. If you look at a digital impression versus conventional impression, you know, there's less patient discomfort with the digital impressions, there's no goop or goo in their mouth.

Dr. Birdi: It takes less time. I can do a full-arch scan now in less than 10 seconds. No need for model pouring. You never lose information either, which is fantastic, and you don't need to store these models. And, exactly, you're not keeping anything around. Now conventional impression is, I would say more discomfort, takes more time. You've got to pour model and you need to have a place to keep the models over time. I think this is a direct comparison, but the other beauty of it is that digital impressions don't do just impressions. You know, when we look at conventional impressions we're always wondering, well, you know, we can take an impression. And that's really all it does. We can pour a model. But the beauty with digital impressions when we looked at so many different kinds and literature and there's newer and newer and newer ones out to the iOS was just a few days ago.

Dr. Birdi: And, we have, you know, I think something like over 10 new iOS scanners coming to market. But, the beauty of these, just like with all the technology out there, it's not just about what you're using it for now. It's what can it do for you later? And so, the beauty of this for now is like is not only can it just take impressions for you, it can do that in not just an analog form. This study by Nedelcu [et al.] shows basically that when looked at all the different iOS scanners out there and really truthfully found out that the most important thing to adopt an iOS scanner is to have color. So, if I had to give a tidbit to anybody, I would say that if you're going to buy a digital impression system today, it's got to be color. And if it's not color, you're really not getting what you could because the benefits of color are, not just from the, from the laboratory technician, but later on.

Dr. Birdi: What I mean by what else can your digital impression system do for you? There's a lot of things you can do. Now in this case, for instance, you can use an iOS scanner to take a shade [inaudible] for a restoration and the shade is quite accurate, quite repeatable. But, it's more than just taking an impression. There's so much more you can do. Here's a video now of what else we can do with just the digital impression. So, this is the one of the newest scanners that just came out and the scanner now does so much more than just taking an impression. It's not only is it a digital impression system. It's an intraoral camera, it reads 3D geometry. It also does everything in real color. It takes a [inaudible] like I

showed you previously. But what other things you can do with it is that patient's physical motion.

Dr. Birdi: Now you can track articulation and occlusion just on the digital impression system, so you can set your occlusion of the restorations and do an occlusal analysis. You can take, now you can look at surface caries just through iOS scanner. You can look at the caries that are possibly there and you can also look at interproximal caries. You can imagine the technology is not just what it says. It's much more than that. So, iOS scanning for sure has the ability to provide you much more in your office and I think that's the best place for someone like a general dentist or anyone that's going to be into it to start. Now, what are the other technologies? Well, I think when it comes to e.max or when it comes to restorations that we're using in our practice, being able to mill them today is going to be really cool.

Dr. Birdi: And I think we're able to do that tremendously using something as large as a [inaudible], but also something as fun as some of these chairside mills that are available now, whether it's Serac, whether it's Ivoclar. There's so many of them out there. And with the advent of different materials, this new milling machine will be out to market soon and it doesn't even need an air input. It can just be plugged into the wall like a microwave and it'll work and mill anything you want. So the ability to be able to do this in your office is fantastic. Same day dentistry and also providing teeth in one day. And the benefits are the two-fold: you save money, you save time, and what a great way to build your practice by being able to provide same-day restorations and the mills that are we're talking about are the same ones that your commercial laboratory may use.

Dr. Birdi: And what about 3D printing? 3D printing is a lot of fun. We've been adopting 3D printing also in our office for multiple years now and it's been a tremendous amount of fun. Now you can spend a lot of money on the 3D printers, but ones like the ones you see on the screen are just a few thousand dollars, they're not very expensive and you'll be able to output a lot of things. You can print 3D aligners or orthodontic aligners. You can 3D print night guards, you can 3D print so many things. In our office, we 3D print a tremendous number of surgical guides. And that really allows you to do a lot, 3D print dentures, you can 3D print models, night guards, and even some toys for your kids. There's a lot of things you can do utilizing a 3D printer.

Dr. Birdi: And the coolest thing about it too is that you can 3D print your surgical guides which we do in our office all the time, which allows you to just take your office that one step further if you're placing the implants in your office well to help the ability to 3D print a guided [inaudible] in a day and then utilize it. Or even if you can mill it, that's fantastic. It's very powerful as a practitioner and I think it's fantastic for you to really get to that point. And you can print multiple different types of multiple different materials. So, you know, I think the advent of the

technology is amazing. I think the sequence of adoption is iOS scanning first and then maybe going to printing because it's bit more inexpensive before you get into milling. And the key to this is time. If you need to be able to spend the time to do this or have your staff involved, or you may want to look at having laboratory technician that comes into your office or is shared between multiple offices to really help you adopt the technology, you know just having the technology in the office is very powerful.

Dr. O'Keefe:

Bobby, thank you very much for these insights. Look forward to seeing you in May at the ODA meeting.