



In Practice

WITH DR. RONALD E. GOLDSTEIN

What Are the Newest Technologies That We Should Consider for Our Practices? Part 1



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When it comes to knowing advanced technology—dental or otherwise—I know of no one more qualified than Barry Freyberg. [QA. Need his degrees.] Barry stays on the cutting edge of all types of computer technology, especially dental office systems. Barry not only is an excellent dentist himself but also stays ahead of the curve in technology to help others practice better dentistry and manage their practices through such technology. He gives his objective views freely, and I am so pleased he has agreed to share his opinions and predictions with us.

RG: What is the newest technology available today that dentists should be using?

BF: Actually, there are many technologies dentists already own that they don't use. For example, dentists who own

major computer systems have capabilities that far exceed what probably 95% of them use. Let's say these computers are going into their treatment rooms. With computers in treatment rooms, dentists have finally reached a point where they don't need paper printouts. A dentist might ask, "Well, what do I need to buy to do that?"

Most already own what is needed. For the computers in the treatment rooms, you need a management system capable of doing electronic notes and recording the patient's history—dental and medical. Most dental programs have that capability. You need intraoral and extraoral cameras—most dentists have them as well. Images from these cameras should be used as the patient record. The new patient record no longer consists of drawn pictures in the chart but rather digital images of existing conditions. It is a technology many dentists own, but for whatever reason they are not using it for record keeping.

Periodontal charting is another hot technology that many do not use. Periodontal charting can be done with digital images instead of drawings or charts and is needed for treatment, insurance documentation, and patient motivation. [QA. Edits okay?]

Electronic signatures for insurance, HIPPA, or other things can be on file. Most of these systems allow for that.

Dentists have so many capa-

bilities and technologies but many have not organized them into the patient flow or incorporated them into the day-to-day function of a practice.

RG: What is coming down the pipe in practice management?

BF: Patients will have the ability to check their appointments, to pay their bills online, to look at their treatment plans online, to change their appointments on the Internet, and to register online from your Web site. Some offices are already doing each of these things electronically but it will eventually become commonplace—just as electronic billing became commonplace 20 years ago. Patients will be registering on the Web; they will be asking you questions on the Web; they will be sharing information with spouses who had not been present at a consultation visit. All these things are done today but they are not yet common.

In addition to that we will see how practice management vendors are going to be adding repetitive electronic transactions as a way for them to make income because most of us already own our systems and are pretty happy with them. So what we will see added to electronic claims are things like seeing our statements going out through the Internet to the vendor and the ability to take money out of a patient's checking account through scheduled direct electronic trans-

fers. Computer vendors will get the income instead of the bank, and dentists will save money and get a lot more efficiency. This reduces the number of times patients fail to make payments.

RG: What do you see as the future for digital radiography?

[QA. Reworked question. Please review.]

BF: We all know about digital radiography—that is old news—but what is going to be interesting is being able to view the x-rays in three dimensions. We will eventually have three-dimensional diagnostic x-rays, and I predict that some of the finer diagnostic tools in medicine—MRIs, CAT-scan types of technologies, three-dimensional radiographic analysis of an area or of a tooth—will eventually filter down to our profession, and this will be an incredible boon to us.

Another example is the use of three-dimensional models. Right now only Invisalign (Align Technology, Inc) [QA: Is this the correct prouct?] can scan the model, but that will be more commonly done one day. The technology is here now but we are not using it.

In comparison [QA. To what?], dentistry has a small number of dentists. There is very little return on any investment to create specific dental technology. [QA. Edit okay?] Technology is developed for general medicine then later re-engineered for dentistry.

Something I have been doing, which most dentists do not do yet, is securely sending records through the Internet for specialists' laboratories. I use a product called Transnet Online (Edusoft) [QA. **Is this the correct manufacturer?**], which allows me to upload images, files, x-rays, and instructions. If I have an endodontics case, I use an endodontics form. If I have a periodontics case, I use a periodontics form, and so on. I upload the images to the endodontist; he gets an email that he has a special case to work on; he goes on the web to the virtual treatment room; and there are the x-rays and everything else he needs to make a recommendation. And if he chooses, he can copy and paste the x-ray into his own management software.

RG: Is this a subscription?

BF: Basically, yes. Some specialists are subscribing to it as a marketing tool for giving and receiving referrals, and it's not expensive at all. The laboratories pay for it on their end. [QA. **So the dentists/specialists subscribe, but the lab techs have to pay for it?**]

Communication is more secure, and it is organized and backed up. Many dentists perceive new technologies as being more work, ie, "I have to get on the Web, upload the x-ray, write the instructions, etc." But they're doing all that anyway. They are copying the x-ray, backing it up or printing it, filling out the form, putting it in an envelope, addressing it, adding postage, and mailing it. Electronically, it is more accurate; it is backed-up; it is faster; it is easier; and, of course, there is no paper involved on either end.

In medicine—and the American Dental Association has been participating with this since 1996—there are standards being developed called the DICOM standards (Dental Imaging and Communications standards). These are standards that are being developed and that already exist to some degree in medicine. Electronic records—electronic images and electronic x-rays of

all sorts—are written to a standard format so that they can be shared across different platforms.

RG: Can you give us an example?

BF: My patient comes in and I use Dentech practice management software (Softech, Inc), Dentsply Gendex, and Trophy USA imaging software. The patient moves to California, and

Electronic records are written to a standard format so that they can be shared across different platforms.

the new dentist uses Dentrix and Dexis software. My images and records will transfer because of DICOM standards.

As another example, my den-

tal management company goes out of business so I must buy a new program. My x-rays and other patient records should still be compatible. Smaller issues

Aou have to ensure that the systems are compatible so that the important things get through.

such as “How much does the patient owe me?” “What treatment did I do?” “When is the patient’s recall due?” are commonly lost. It is okay to lose these in transit, but it is not okay to lose x-rays or records. You

have to ensure that the systems are compatible so that the important things get through.

Let’s say I buy a new x-ray system. Ten years from now, it has to be compatible with my old radiographs. These are the things

that cause dentists to be wary of purchasing technological advancements. “What if I sell my practice?” “What happens if my specialist uses different software?” “How do I get these x-rays to him?” In the future, a standard will apply to it all; it will have to. **[QA. But it doesn’t now, right? So why would dentists use such technology at all right now if it**

currently isn’t adaptable to other software?]

RG: Anything new in patient education?

BF: We no longer should think of patient education as a unit we move from room to room. The latest and greatest innovation is the fact that it is networked, and we can create our own disc for a patient to take home to educate an absent spouse or perhaps a parent or guardian. Some of this can be accessed on the Internet by the patient on a secure network.

Another technology worthy of mention is Venga (IDG of Wisconsin). Venga is a software system used for silent communication throughout the office through our PCs and monitors, replacing the old lights and buzzers. You can configure it the way you want. When staff members change, you need only rewrite over the button. **[QA. What button?]** Colors are set, **[QA. You mean it uses a color-coded system?]** so when I am needed for hygiene, it can let my assistant know to tell me. If there is a patient waiting, I can click to say, “It’s going to be another 5 minutes or more. Do something.” **[QA. You mean as if talking to your staff? Maybe replace ‘do something’ with ‘please inform the patient.’]** Or if an important phone call comes in, it communicates silently and with a lot more detail. I can broadcast to everyone, send a message intended only for one other person, or receive a message intended only for me. **[QA. Where will you receive the message? Would you need computer monitors in every room of your office?]** It’s very configurable, compared to the old light systems. Additionally, you’re using your existing network, so no extra installations of equipment are necessary. **[QA. Confusing explanation. If the monitors are used for these messages, then how does one get back to the original purpose of the computer?]**

Next month, Dr. Goldstein will continue his interview with

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Dr. Freyberg and ask him about treatment system technology, CAD/CAM systems, and when old equipment should be replaced.