Making sense of digital radiography

By Lorne Lavine, DMD

The look and feel of the modern dental practice has changed dramatically over the past 10 years. Systems that were once paper-based have now moved into the digital realm. In many dental advances over the past few years, there’s no doubt that the technology has been the driving force in this process. This is as true in other fields as it has been in dentistry.

In the early 1990s, intraoral cameras were all the rage. In the late '90s, it was digital cameras. At present, no other topic seems to generate greater interest than digital radiography. While entire books can be written on the subject, the goal for this article is to focus on how digital radiography can improve the profitability of the practice, particularly by improving case acceptance.

In Part II, which will be published in a few weeks, we’ll take a closer look at the infrastructure that is required as this is often overlooked by many practices.

Having worked with hundreds of offices that have installed digital radiography, the biggest hurdle to adopting this technology is financial. While these initial costs are high, there is little doubt that using digital radiography can definitely help the bottom line of the practice by increasing patients’ willingness to come to the practice and accept treatment. There are a number of key areas where digital radiography makes sense.

Image size and quality matters

There is no doubt that in order to increase case acceptance, we have to improve our ability to diagnose disease, and the vast majority of dental practices find digital radiography to be superior to film.

In a recent survey, over 73 percent of the respondents claimed that they found digital radiography to be more diagnostic than film. There are a few reasons for this.

First, there’s a big difference between seeing a life-size image that is around 1 inch compared to an image magnified to fill up a typical 17- or 19-inch screen. Secondly, and just as important, all digital radiography software gives us incredible tools to improve diagnostics. There are a few programs that really simplify this process.

For example, XDR, a smaller company from the Los Angeles area, offers a “caries” icon and a “peri” icon. One click of the icons will apply numerous filters and enhancements to bring out the diagnostic features of the image with minimal muss and fuss.

One thing to keep in mind, however, is that if it’s necessary to enhance every image in order to make it diagnostic, then there’s probably something wrong with the exposure times on the X-ray head or other problems. It’s not an efficient use of your time if you have to modify every raw image that you take.

Timesaving

A practice that is efficient and saves time will be very attractive to your patient base, many who are busy and would prefer to minimize the time spent in the office. The time saved with digital radiography is quite significant. However, it’s important to understand that the time saved is limited to the hard sensors.

While an excellent option for many offices, phosphor plate systems do not provide any time saving over traditional film. Many offices can start and finish a full mouth series of radiographs...