A "Dual Digital" approach

With the availability of ultra-compact, low-cost, flexible phosphor sensor units like Air Techniques' ScanX® Swift, clinicians should try this approach.

by scott benjamin, dds

For years I have been advising the dental profession to pursue a "dual digital" approach to radiography by utilizing both digital options available to them: direct sensors and flexible phosphor sensors. Today, this approach makes more sense—and cents—than ever before, particularly with the availability of ultracompact, low-cost, flexible phosphor sensor units like the ScanX® Swift.

Many practices use film in concert with their direct sensors to accommodate situations where a rigid direct sensor is impractical for use with certain patients. In my experience, however, it is much more beneficial to pair direct sensors with flexible phosphor sensors, which have numerous advantages over film:

Image resolution

Most clinicians who have used both film and flexible phosphor sensors agree that the image resolution with the latter is superior.

Diagnostic enhancement. Flexible phosphor sensors allow the practitioner to conveniently analyze the images for diagnostic purposes with the same digital tools that are utilized with direct



ScanX Swift's flexible phosphor sensors can offer 17% to 38% more image area than direct sensors.

sensors, such as adjusting the brightness, contrast, grayscale, size, and sharpness.

Processing speed

With film it can take 6 to 8 minutes to complete a full-mouth series, compared to less than 2 minutes with flexible phosphor sensors. With a compact unit designed for chairside use, such as the ScanX® Swift, it only takes nine seconds to deliver an image to your operatory monitor.

Cost savings, benefits

An all-digital approach to radiography also means saving the practice up to thousands of dollars currently spent purchasing chemicals each year.

Additional benefits include office space efficiency and staff productivity. Going filmless eliminates the need to devote a room or significant counter space to a chemical processor, or other precious space to chemical bottles and file cabinets containing film X-rays.

The flexible phosphor digital processor requires no routine cleaning or maintenance, which eliminates one of the staff's most dreaded tasks: maintaining the chemical processor. This helps with productivity and staff morale.

Replacing film with flexible phosphor sensors will make the practice compliant with the coming government mandate that all dental and medical offices use all-digital storage of patient data.

Image access and recordkeeping— The practice's efficiency and productivity will benefit from the convenience of digital image access and paperless recordkeeping.

Practices employing a "dual digital" approach to radiography will find that flexible phosphor sensors complement rigid direct sensors by overcoming several of their shortcomings:

Identical sizes to film—Flexible phosphor sensors are available in the exact same sizes as film, unlike direct sensors.

Large, rigid direct sensors can be difficult, and sometimes impossible, to accurately position in the oral cavities of



With ScanX Swift, you can capture 100% of the images you want, ensuring complete diagnosis, helping your patients understand and receive the treatment they need.

patients with large tori, small mouths, gag reflexes, or the inability to open their mouths wide. With flexible phosphor sensors, this is simply not a problem.

The smaller, thinner size and softer edges of the flexible phosphor sensors, coupled with the lack of wires, make for a more pleasant patient experience.

Image area/ workflow, low costs

Flexible phosphor sensors generally offer 17%-to-38% greater image area than direct sensors, which means the clinician can more assuredly capture the complete coronal-to-apical length, get more mesial-distal information, rarely miss a root tip or distal cusp, and experience fewer retakes.

The fact that the workflow with flexible phosphor sensors is essentially identical to film means minimal time spent teaching a new protocol to the practice's staff.

Most flexible phosphor sensors cost only around \$40, a fraction of the cost of direct sensors, and can be reused hundreds and perhaps even thousands of times. In addition, there is no need for costly sensor insurance that is normally considered advisable for direct sensors.

When a practice uses both direct sensors and flexible phosphor sensors and one of the systems goes down, the practice will still have the other as a digital back-up. The "dual digital" approach also provides the practice a way to increase its revenues. When a patient struggles with the placement of a digital sensor, it is tempting to try to get by without the appropriate diagnostic information that would be provided by a radiograph. However, when the practice has the option of using a smaller, thinner, flexible phosphor sensor with such a patient, the necessary radiographic information can be captured without delay, compromise or lost revenue.

Practices that now rely solely on film radiography may find flexible phosphor sensors to be the easiest way transition into the digital world and avoid the larger financial commitment required with direct sensors.

Practices that are still using film radiography—either alone or in concert with direct sensors—will find that replacing film with flexible phosphor sensors can simultaneously enhance their patient care, office productivity and practice profitability. •