

## Harness the power of technology

With the right equipment and understanding how to use it properly, you can work more efficiently, with less stress and engender greater patient loyalty. Here's how to get started.

By Linda Meeuwenberg, RDH, MA, MA

As a baby boomer, I attended college in the 1960s, graduating from dental hygiene school in 1968. Perhaps some of you are old enough to remember when we didn't use lead aprons or wear gloves and masks. We scaled teeth with single-ended hand instruments, mixed our own fluorides, developed radiographs in darkrooms, wore starched dresses and nurses' caps, and used belt-driven handpieces. For those of you who have no idea what I am talking about, you probably don't know what LP record albums are and you are likely enjoying the benefits of a modern dental office that is technology driven.

As in our private lives, technology has transformed today's modern dental office. Offices now rely on technology to enhance practice management, diagnostics and therapeutics, patient education, and improve communication. Nevertheless, many clinicians have yet to develop a sound understanding of the technology they use and its capabilities.

So what, you say? Well, the fact is this limits clinicians' ultimate success with these tools. Moreover, those who don't have access to some of the latest technology or don't use it properly may not be working ergonomically, placing themselves at risk for various types of injuries. In addition, we have

to consider the power of technology for building stronger relationships with patients and for making us more efficient, productive and profitable.

I know the value of working with technology well because learning to embrace a computer as an adult was a difficult journey for me nearly 20 years ago. I could work so much quicker on my familiar typewriter. Fortunately, modern computer systems are much more user friendly today. Although I did not embrace the use of a computer initially, today I would rather be without my car than without my computer.

For the new graduate, technology is not such a leap as most curricula include components on technology and students are accustomed to using computers for classroom assignments, Internet research, and communication via email. Many dental hygiene programs also have new or renovated clinics featuring the latest technology at each student station.

#### Working healthier

For hygienists and dentists, technology has paved the way to work healthier. Using ultrasonic scaling relieves the hygienist of over-taxed muscles of heavy hand instrumentation. Still, confusion abounds with the many varieties of sonic and ultrasonic scaling devices. Many operators don't know if their power scaler is a sonic or ultrasonic, piezoelectric or magnetostrictive, auto- or manual-tuned?

Understanding the operating features of an ultrasonic scaler allows you to optimize its use in your clinical regimen. For instance, to use the "Holbrook Technique," you need a manually tunable magnetostrictive device.

Similarly, operators need to be up to speed on the specific techniques used with peizoelectric and magnetostrictive devices because **OF THE DIFFERENCES** between these technologies. **For instance, the motion of**

the tip is linear on a piezoelectric unit whereas, it is elliptical on the magnetostrictive unit. Using the insert tip on a device that moves elliptical allows the energy to “work” by moving it any direction. A linear movement of energy requires the insert tip to be used in a specific position.

Regardless of the type of ultrasonic scaling unit you use, there are a variety of insert tips available. We have emerged from fat inserts used primarily for supragingival heavy calculus removal to slimmer inserts for subgingival debridement. One of the greatest innovations is the swivel insert tip. Launched by Hu-Friedy, this insert tip moves with the twist of the finger/thumb, giving the hygienist greater comfort and reducing treatment time as there is no need to stop for manual turning of the insert.

Unfortunately, many clinicians have yet to reap the full benefits of technology today. In fact, occupational pain has caused many hygienists to reduce their workweek and/or leave the profession.

The good news is modern office technology can address these concerns. We can now practice with less muscle and eye fatigue and go home feeling good physically and mentally. What a difference today compared to practicing in the 1960s.

Replace the image described in the first paragraph of this article with an image of a hygienist sitting in a comfortable chair that properly supports the body and moves with the body, and using power scaling on most patients. Visualize having enough light to see behind the last molars, a magnified work field, no more hand-written entries in a paper chart, explaining procedures with the use of intraoral photography, and never running off to the developing room. All this as your patient relaxes to the music of their

choice in an herbal neck wrap.

Today' s technologydriven dental office offers the hygienist opportunities for stimulation of learning and mastering new techniques, procedures, and equipment. Embracing this shift can forge new pathways for hygienists in consulting, sales, speaking, and writing. It can also allow the hygienist to take a leadership role in the office assisting other team members in this paradigm shift.

#### Building patient loyalty

If technology has been a boon to practitioners, it also has helped us forge stronger bonds with patients. Consultants often promote the high-tech/high-touch approach as the ultimate practice builder.

Patients who have experienced high-tech/high-touch dentistry hold it as the gold standard for how they want to be treated. Patients want to feel special while visiting you. If you have all the high-tech without good listening skills, you may sow the seeds for a disgruntled patient. Patients want you to be competent at what you are doing and like seeing state-of-the-art dental equipment. When you deliver on the promise of technology, they will leave your office feeling like you made their day better.

Remember, too, that today' s dental consumers are savvy. The information they want is usually just a mouse click away. Patients also are embracing technology in their own lives. I believe they have come to expect the use of technology in the health care industry delivered in a caring environment.

We can expect greater adherence to our recommendations when they are supported with today' s technology. Showing the patient their electronically recorded periodontal chart, digitized radiographs, and intraoral photographs

expedites the patient's grasp of complex treatment options. At the same time, there are clear benefits to the practice. Electronic filing enables the office to submit insurance claims and obtain reimbursement more quickly. Electronic periodontal charting improves accuracy and efficiency while serving to better educate patients. Digital radiography, meanwhile, greatly improves efficiency and eliminates the costs associated with film.

So why is there resistance to technology? Some cling to their comfort zone. It can be threatening if you have practiced the same way most of your career and are secure in your routines. Enter digitized equipment and your headaches can begin, especially if you don't understand how the equipment works or how to trouble shoot when something goes wrong. Don't allow yourself to get stuck in this trap.

Raise your technology IQ

So where do you start? Take charge of your learning curve. Go to dental meetings and visit the exhibition hall. Pick up literature, speak with the equipment representatives, and attend seminars. Become involved in your professional association and local study clubs or, better yet, initiate a local study club. Forming a support network to discuss your challenges can boost your morale, and stimulate problem-solving strategies. Share articles that you read in your dental journals and participate in online chat rooms and with your colleagues. Visit offices that have embraced technology. They will be pleased to show off their practices.

Learn all you can about the technology that abounds. Go to your next state dental meeting and take a "test drive" in an ergonomic stool that supports your body allowing for good posture. Combine the ergonomic chair with a set of magnification loupes that allow you to magnify the work area

and sit in an upright position. Test the headlamp systems that allow for reduced eye fatigue and greater visual acuity. Learn all that you can about ultrasonic scaling devices and find the unit that works best for you and your practice. Simply embracing these areas alone can increase your practice longevity and health.

While you're at it, the next time you're at a dental trade show, catch up on everything from power assisted toothbrushes to laser caries detector systems to digital radiography, paperless charting systems, intraoral cameras, laser whitening, and fiber optic delivery to facilitate subgingival illumination. Ask questions, discuss what you have learned with your colleagues at lunch and bring back information to discuss with your team. Be a leader by soaking up all the new knowledge you can.

A common question I am asked at my continuing education courses is how do I convince my employer to purchase new equipment? This question leads me to believe that hygienists are eager to embrace technology, but may feel that they don't get the support from the employer.

I find that many hygienists are empowering themselves with the purchase of their own magnification loupes, ergonomic chair and/or an ultrasonic unit. When you have made the investment, the equipment moves with you if you should leave the practice. There is no happier hygienist than the one who has the best equipment to practice the ultimate care that his/her patients have come to expect.

Embracing technology may just be the jump-start you need to re-charge your battery. Be patient with yourself as you learn new technology and ask for support from your office team. Be prepared for the extra time it takes to integrate a new piece of technology into your practice. Initially technology

slows you down as you face your learning curve, but ultimately it leads to greater efficiency.

Remember, the teams that learn together, profit together. Patients enjoy teams that are pleasant and smiling and project enjoyment in serving the patients. So don't let the added stress of resisting change stifle your enthusiasm. We are fortunate to have a profession that continues to move forward embracing new knowledge and technology to allow us to provide our patients with the ultimate patient care.

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