Why paperless dentistry? Why NOW?

by Linda Piccinini, RDA, and Bruce A. Stephenson, DDS, FAGD

The concept of "paperless dentistry" is often misunderstood. While most dental practices are now computerized, many practices don't use the key features that make paperless dentistry easier and more profitable. The purpose of this article is to define paperless dentistry, illustrate its advantages over paper-based systems, and discuss why it is now so easy and inexpensive to benefit from its rewards.

Paperless dentistry is the practical use of computers as "force multipliers" or "electronic levers" so that more and better patient care can be provided in a shorter time with less effort.[1] Paperless dentistry makes working in a dental practice easier and more profitable, but it does not mean the elimination of all paper! Paper is still good for many things. It makes a great "display device," a portable and lightweight medium patients can take home to show how great they'll look with porcelain veneers or to remind them

about their postoperative care. It does not make sense to eliminate paper while it still provides a valuable service. But paper should no longer be used for storage, searching or sorting. These tasks are much better done by computer.

A common misconception is thinking that paperless dentistry means putting all patient records in a computer. This is called "chartless"[2] and may not meet the objectives of providing more and better patient care in a shorter time with less effort. For example, simply scanning all patient records into computerized form could make you chartless without providing the key advantages of computers — storage, searching, and sorting. Let's look at each of these tasks and see how much better computers can handle them.

Our paper storage took up a lot of room and cost a fair amount of money. Paper records were often close to illegible because they involved many hastily handwritten notes. It was not uncommon for a mature practice to have boxes

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and boxes of inactive charts stored in a garage or basement. But computer storage is essentially infinite and free. One hundred years of patient records can be stored in a device about the size of a cell phone that costs less than $200. Paper records were very susceptible to fire and flood damage. But in a well-computerized office all records are duplicated and easily retrievable from both on-site and off-site backups. Even in the unlikely event of a server crash, these backups allow quick restoration of all patient, X-ray, accounting, and personnel records. Not a single patient record is ever lost.

The information is probably in there (you hope!) but the trick is to find it!

Searching for paper-based records was time consuming because it depended on accurate filing by the last user. Often the last user seemed to have suffered from dyslexia or used the Martian alphabet! Searching for paper charts wasted time. Computers instantly retrieve any chart for any patient, and file it back correctly. The same patient's chart can be viewed on several computers simultaneously. One person can bill insurance while another makes an appointment and yet a third completes the progress notes. The doctor can access paperless charts from home — or from any computer in the world — using a secure, encrypted In-

ternet connection.[3] Information is entered only once, but can be used simultaneously everywhere in the system. The patient's birthday is entered once and copied to the medical history, calculating the patient's age to display in the chart, then placed correctly on every insurance submission. The single entry can also be used to track birthday card lists, printed or e-mailed for referrals to other doctors, printed on prescription forms, and used to ensure that child prophies are not posted for adults. This force multiplier requires less time and labor and reduces errors. These paperless tasks are simply impossible with paper-based systems.

Master your data for the greatest benefits

Information sorting is the greatest benefit of paperless dentistry.[4] Think about a paper ledger tray filled with patient balances. The only way to sort the paper ledgers was by alphabet. It was tedious, time-consuming, inefficient, and inaccurate. A paperless practice can instantly sort patient accounts by criteria other than the alphabet. For example, the oldest balance or largest balance first is much more useful than an alphabetic sort. Or, one can sort by the oldest outstanding insurance claims and subsort by individual carrier, which makes calling up outstanding claims quicker. Sorting unscheduled treatment plans by treatment plan date, largest treatment plan first, or by specific procedures such as pontic or veneer provides a productive way to fill a schedule.

Sorting patients by overdue recall date ensures that patients get the preventive care they need and keeps the hygienist busy. Where do your new patients come from? Sorting by referral source gives you invaluable practice management information and reminds you who to thank for all the referrals. The American Heart Association has just released new guidelines[5] for antibiotic premedication, and at least one malpractice carrier[6] has recommended sending letters to all patients who were previously premedicated. With paper-based charts this would require days of searching, but can now be done in seconds with a paperless system. These are just a few examples of how a paperless practice can improve patient care in a shorter time with less effort.

Most dental offices do not use a paper appointment book, but they are not truly paperless because they do not use the searching and sorting capabilities of a good scheduler. Management consultants now recommend the use of daily production goals. When the treatment — entered only one time when it is diagnosed — is tied to an appointment, a computer scheduler can automatically display the booked production for the day. The computer does the work, which requires no effort from staff members. Filling an open appointment time productively is easier be-

cause the paperless records allow instant chart audits for unscheduled treatment plans.

The computer automatically stores broken appointments and counts missed appointments for each patient and provider each day and month. The list of broken appointments is quickly sorted in order to send letters and e-mails or make phone calls to ensure patients are not overlooked. The antiquated axiom that only one person in the office should make all appointments has proven false. Paperless scheduling is multi-user and decentralized. Appointments should be made in all areas of the office, especially in the operatory. The doctor, patient, and chairside assistant can collaborate on when, how long, and what treatment will be done next. This eliminates confusion and errors. Patients appreciate not wasting time waiting at the front desk. They also appreciate the legibility and accuracy of a computer-printed (on paper!) appointment card and the up-to-date thoroughness of an e-mail reminder.

Computerized progress notes are the easiest and cheapest paperless task to master, and instantly provide increased time savings and office efficiency. And yet, this seems to present the biggest psychological hurtle for most dentists. Even the Federal Government wants us to be paperless![7] It has set the goal for all medical records to be paperless by 2014. Paper charting was slow,

With a mobile, wirelessly connected Tablet PC, every piece of information in every record for every patient is just a stylus tap away.

often illegible, and required an unnecessary and unproductive amount of doctor time. Paperless charting does not require typing, but uses either a few mouse clicks or stylus taps on the screen to provide paragraphs of accurate, legible, correctly spelled and customized notes. Several sentences of comprehensive documentation for a procedure such as a crown are completed in less than one second in the progress notes and copied to an insurance submission without ever touching a keyboard. The use of blank templates for exams, consents, medical histories, treatment plans, and financial arrangements ensure that all relevant information is quickly recorded. An informal survey of our clients shows paperless charting saves an average of two hours of doctor time per week and is usually completed before the patient leaves the operatory. This provides more and better patient care in a shorter time with less effort! (For more information on free paperless progress notes, visit our Web site at www.PaperlessDentistry.com.)

Digitize, organize, and maximize patient photos

Dental images such as X-rays, intraoral camera images, and extraoral digital photographs provide another practical illustration of how a paperless dental practice can use storage, searching, and sorting very profitably. Imaging also illustrates how paperless dentistry is constantly evolving. Fifteen years ago, dental photography required cumbersome cameras and inconvenient 35mm film. No one disputed that it provided good documentation and great patient motivation and education, but it was expensive and difficult. Storage took up a lot of space and sorting took a lot of time.

Computer imaging and inexpensive cameras have eliminated all these disadvantages and make it easy to graphically show patients their problems. Even the least expensive home "point and shoot" digital camera takes wonderful smile photos for an image on a 19-inch color monitor right in front of the patient in seconds. When the patient inevitably asks, "Are those my teeth?" you no longer have to point out all of the dental imperfections — just let the patient look at the monitor to find them. You don't have to "sell" dentistry; patients will ask for it! Using a light, portable intraoral camera not only enhances your ability to see and document caries, cracks, fracture lines, and deteriorating margins, it allows patients to spot them right along with you. Digital radiography is rapidly becoming the standard by which patients judge a modern dental practice. They have heard it provides better diagnosis with less radiation and they are increasingly seeking practices that provide this improvement.

OK, so why now?

You can see the advantages, but what makes *now* such a profitable time to add paperless dentistry to your office? Each day you wait costs you money, stress, confusion, wasted time, and all the lost opportunities for a better practice. This is no longer "bleeding edge" technology. It is sound, practical, easy, widely used, inexpensive, cost-effective, and rapidly achievable. Consider how reliable and inexpensive computers have become.[8] All computerized practices, paperless or not, need a reliable file server and bullet-proof on-site and off-site backup system.[9] Such systems used to cost several thousand dollars, but are now only a few hundred dollars. Even a server and backup system for a large, multi-doctor practice with many operatories can be relatively inexpensive with the help of a knowledgeable consultant. Dentists have often been oversold and misinformed on computer hardware. Keep in mind, whether a small practice or large, you want a "sturdy truck," not a "sports car!" While computers are now very reliable, workstations do occasionally crash and require re-booting. But your file server should run for years without crashing. If yours doesn't, you should consider a new file server … or a new computer consultant. Rock-solid reliability and tested,

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redundant backups are required for all dental offices, but have never been so inexpensive or easily obtainable.

Spending a lot of money is no longer a prerequisite for paperless dentistry. Neither is changing your brand of dental software. Most dental software companies have already provided the basic features. You do not need your dental software to have special automatic charting features. You only need a place in the software to store your charting. The charting itself can more easily and accurately be produced outside the dental software using programs such as OpenOffice[9] (free), Microsoft Word[10] (either cheap or free), or EasyNotesPro[11] (inexpensive and very slick). The completed charting is then simply pasted into the place provided in the dental software. Similarly, your imaging features need not be provided by your dental software. Software specifically for digital X-ray and imaging usually provides better features than the ones included with practice management software. Any of these separate imaging programs can now be seamlessly linked to virtually any management software.

These days, the advantages of paperless dentistry are not determined by your brand of dental software, but by how well you use that software. Quality dentistry is determined by the skill of the dentist, not the brand of the handpiece — it's the painter, not the brush! And, like skill in clinical dentistry, paperless dentistry is a journey, not a destination. It can most easily be done in increments. Skills increase through practice and training, and capabilities ex-

pand as the computer technology increases. But there has never been an easier time to seize the advantages of paperless dentistry, providing more and better patient care in a shorter time with less effort. You, your staff, and your patients deserve it!

Links to the references cited in this article, and a great deal of other information about Paperless Dentistry, is available at www.PaperlessDentistry.com. **DE**

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