



CASE STUDY

Preventive Pain Management

Escaping pain is a powerful motivator. When people have serious toothaches, they seek a capable dentist to relieve their pain. Also, many people select—and remain with—a dentist who can keep pain to a minimum during a dental procedure.



Solution Overview

- RDX® QuikStor™
- HP server
- Multiple HP workstations
- Kodak digital sensor
- Kodak Practice Management software

For small and medium-sized businesses, record keeping can be a source of major stress, perhaps comparable to physical pain. Storing records, retrieving data, and meeting data-retention requirements can create considerable operational difficulties. Dentist Rick Nalin has a highly successful dental practice in Southern California, and he knows how to minimize pain for his patients. He also has first-hand knowledge about the pain associated with record keeping.

Going Digital

Dr. Nalin's dedication to painless dental treatment has created a loyal and extensive patient base. In practice for more than 35 years, he has treated almost 70,000 people. His enormous success has generated a huge amount of information to store and manage, including patient files, X-rays, financial records, and business documents. Safely storing dental records is vital to his practice as HIPPA regulations require patient records to be retained for seven years. Dr. Nalin made the decision last year to adopt a 100 percent digital system, not only for patient records but also X-rays. His dental technicians now take the X-rays with a Kodak digital sensor. This allows the dentist and technicians to see the X-rays in real time and take more if necessary without having the patient go through a whole new set of X-rays. The images are captured on HP workstations then shared/organized on an HP server. Dr. Nalin uses Kodak Practice Management software, which has a comprehensive set of X-ray imaging tools, as well as time-keeping, charting, and financial capabilities designed specifically for professional dental practices. The software's treatment plan feature allows a dentist, for example, to view the history of all treatment options made available to a patient, both completed and declined, in one window. This is key since all of the patient rooms now have an HP workstation that allows the dentist to share the information with the patient, as well as show them their X-rays and to be able to explain what procedures are recommended based on what they are seeing. The document review feature enables office team members to mark scanned documents for others to review, and the reviewers' comments can be linked to a patient's record.

Survival Strategy

Operating in an earthquake-prone part of the country, Dr. Nalin understands the importance of storing critical information and the ability to recover it. He is also fully aware that natural disasters are not the only threat to the survivability of critical data. Device failures, data corruption, viruses, and human error can destroy critical information in a matter of seconds. For a professional practice, the pain associated with day-to-day record keeping cannot match the agony that could result from a catastrophic loss of valuable records. Many businesses fail after a major interruption. Well aware that data survival is a key part of business survival, Dr. Nalin needed a survival strategy. His system integrator helped him define the data protection approach, including such factors as the backup window, recovery time objective, recovery point objective, and level of protection needed.



recovery is even quicker. I can meet compliance regulations, avoid managerial headaches, and have a bullet-proof backup system with the RDX. I'm now free to focus on what I do best, which is to deliver results for my patients—and relieve their pain as much as possible."

Dr. Rick Nalin, DDS



The RDX QuikStor removable disk storage solution

Fixed Disk or Removable Tape?

Then they had to select the right data protection technology. There were several to choose from, and they were classified into two categories: fixed storage and removable storage.

Fixed storage solutions use disk technology, the system integrator explained, and they consist of either a single disk drive or multiple disks. The technology is generally robust and reliable, but the disks are not portable; they cannot be rotated offsite for increased protection and disaster recovery.

In contrast, removable storage methods offer easy transportability. Traditional removable methods, however, are generally based on tape media. Tape has been the mainstay of backup for 50 years, with data capacities of anywhere from a few hundred kilobytes to several gigabytes. Backup to entry level tape like DAT is time consuming, and is not always 100 percent reliable. Also, it is customary to relocate data to fresh tape every five years or so. The time burden was bad enough, but reliability was a critical issue for an office regulated by HIPPA.

Best of Both Worlds

The system integrator recommended the RDX® QuikStor™, a removable disk storage solution from Overland-Tandberg. The RDX backs up like a tape drive while providing the performance advantages of a disk-to-disk system. The RDX cartridge uses the same 2.5 inch hard disk drives found in notebook computers, meaning that capacities will increase at the same rate over time. The technology provides forward and backward compatibility, enabling a company to upgrade to higher-capacity cartridges in the future, without having to buy a new drive.

The removable cartridge in the RDX looks and handles like a tape cartridge, but performs with the speed and reliability of fixed disk. The cartridge is designed to protect the drive from shock and ESD (electrostatic discharge) problems making the technology rugged enough to be remote vaulted like a tape cartridge. Furthermore, the media is robust, with a service life of at least 10 years and up to 1000 uses. The cartridge itself alerts a user if there is a problem either with the backup or the media, avoiding surprises during data recovery.

"With a DAT drive we had to manually search through hundreds of tapes to find the right one," said Dr. Nalin. "And sometimes we could not recover the file. At the same time, we had to use our main server to look up the data and that required us to do this during business hours, which was hurting our productivity." When the doctor took the step of going digital, he knew that his office needed a different solution—an easier one.

Ease of Implementation and Pain-Free Backups

Deployment of the solution was easy. After the network was set up, Dr. Nalin opened the RDX shipping package, which actually took longer than getting it up and running. He then connected the USB and power and, within two minutes of opening the box, the drive was ready for backup. "This was so simple, and doing my first full file format backup took less than a minute. I was able to take the RDX cartridge out and head home where I dropped the data to my offsite computer. This ensures that I can sleep well at night."

Ease of maintenance is critical for a professional practice. As a small business with only a handful of personnel, a dentist office cannot afford to have an IT staff to manage a technical infrastructure. Once the RDX system was up and running, Dr. Nalin was assured that ongoing maintenance would not be a painful chore. This solution has really taken a load off of his front office staff. They no longer have to go through boxes of tapes to find a patient record. Since all of the data is in full file format now, they can simply do a Google-type search, bring up the records that are needed and make any necessary changes. Data requests have been reduced from three hours to 30 seconds.

