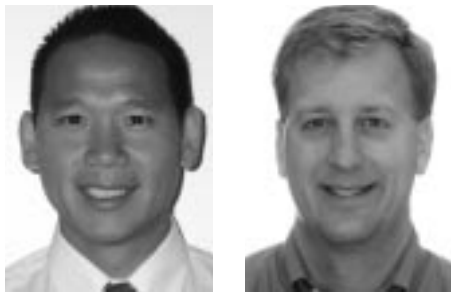


THE CUTTING EDGE

(Editor's Note: This quarterly column is compiled by JCO Technology Editor James Mah. To help keep our readers on The Cutting Edge, Dr. Mah will spotlight a particular area of orthodontic technology every three months. Your suggestions for future subjects or authors are welcome.)

In this month's column, Dr. Robert Haeger describes state-of-the-art Internet usage for the benefit of patients, staff, and clinician in his orthodontic office. He has assembled an impressive array of computer tools for a multitude of practical office applications. For those of you who are looking to adopt such approaches in your own practices, I am sure you will read and reread this summary.

JAMES MAH, DDS, MS, DMS



Dr. Mah

Dr. Haeger

How I Use the Internet in My Office

A friend asked me the other day how I use the Internet and why I would need a high-speed connection in my office. My response was that I simply couldn't function without the Internet any more. I added computers at each chair about 18 months ago, hooked up high-speed Internet service, and totally changed the way I manage patient information. Let me break down my uses of the Internet into three main areas.

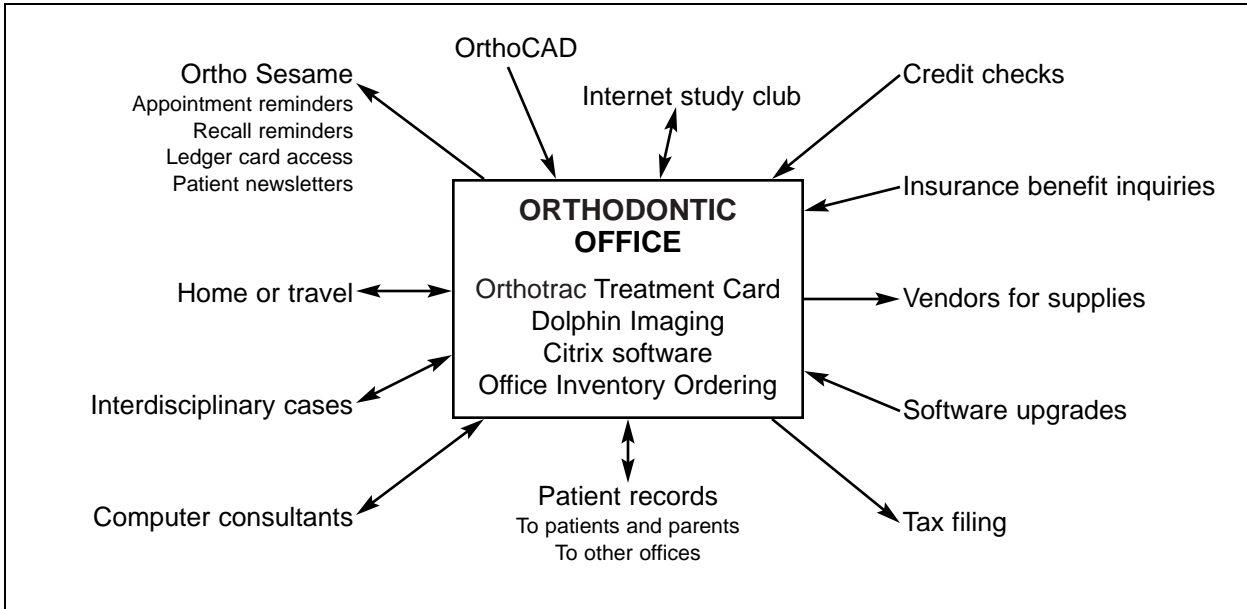
Patient Interface

Appointment scheduling. Patients and parents have password-protected access to view their appointment times 24 hours a day. This works great when a patient forgets an appointment or is at work when the appointment card is at home. The information is always available and saves valuable staff time answering the phone.

Reminder e-mails are automatically sent out to patients two days prior to their scheduled appointments using a Pt Interactive product called Ortho Sesame.* This program downloads the patient schedule and ledger cards nightly, configures them for easy viewing, makes them accessible to the patients, and sends out the e-mails. Approximately 60% of our patients use e-mail routinely, and the reminder system works so well that I contracted Pt Interactive to design and manage our website as well.

We also use Ortho Sesame to send out automatic reminders to patients without scheduled appointments who are due for their retention

*Pt Interactive, Inc., www.orthosesame.com.



Graphic representation of Internet uses in orthodontic office. Arrows show direction of information.

checks or pre-orthodontic recall check-ups. These e-mails are sent out to patients one month before standard postcards are mailed reminding them to call our office for appointments. The system has reduced the number of postcards we need to send, resulting in lower printing costs and labor requirements.

Ledger card access. When financial questions arise, we recommend that patients first print out their insurance and patient ledger cards via our website. This makes it easier for them to articulate their questions and allows us to give specific answers. Although the patients often find the information they need without even calling back, the more complicated questions are answered much more quickly and easily if they have their ledger cards in hand when they call.

For patients who need proof of payment for medical withholding accounts, these can be printed from our website, rather than having our staff make copies and fax them. Patient surveys about our website routinely rate this service as more convenient than calling our office.

Patient communication. We award scholarships to graduating seniors every spring. We can use

Ortho Sesame to send mass e-mails to our patients about the contest, inform them that the application is available from our website, and notify them of the winner. We can also use this feature to send out newsletters and update other contest winners.

E-mailing photographs and x-rays. I use Dolphin Imaging** with a Planmeca*** x-ray machine, so that all images are digitally taken and stored without scanning. The Dolphin software allows me to e-mail patient photographs or x-rays to parents who are unable to come to the office. This is especially advantageous for divorced parents who want to see the malocclusion before they feel comfortable paying for it.

Doctor Uses

Remote access to patient charts. Our charts were converted to electronic about seven months ago using the Orthotrac Classic**** orthodontic

**Dolphin Imaging, www.dolphinimaging.com.

***Planmeca USA, www.planmecausa.com.

****PracticeWorks, Inc., www.practiceworks.com.

operating system, and I can't believe how helpful this has been. The electronic part of each record consists of all the daily treatment notes, letters to dentists, photographs, x-rays, and some models. We still have paper charts for the insurance forms, health histories, signed contracts, and letters from dentists.

All the x-rays and photographs are stored with Dolphin Imaging software. OrthoCAD[†] is used to produce about two-thirds of my study models digitally, e-mailing them to my office in the middle of the night. These programs are bridged together nicely by the Dolphin software, which allows speedy access without opening each individual application.

All the patient data is stored on a Windows 2000 server and available from any Internet connection using Citrix[‡] software. Other remote access programs include PCAnywhere^{††} and Virtual Private Network,^{‡‡} but I find the Citrix software much faster and more flexible. Because the image files are too large to view conveniently at standard modem speeds, I have a high-speed Internet connection at home for instant access to my charts.

The combination of paperless charts and remote access allows me much more flexibility away from the office in treatment planning and correspondence with dental referrers. For emergency patient calls, I can access the charts and solve problems much faster. The Citrix remote access also allows me better communication with the office during extended vacations. My staff simply e-mails me any patient or doctor questions, and I check out the patient charts and make new notes or calls to their dentists or other specialists just as if I were sitting at my desk.

Off-site technical support. With the aid of the Citrix software, I can work with some of the best consultants in the country. I currently use a consultant in Arizona who formats my Orthotrac

questionnaire and letter-writing functions. The computer specialist in California who configured the Citrix software has never been to my office. I e-mail my requests to them; they connect to my computer online, perform the work, and sign off. I pay no travel costs, and I can make seamless improvements at any time.

The high-speed connection has enabled me to upgrade most of my existing software over the Internet. This eliminates the most significant barrier to shopping for the latest additions and installing them. Most of the upgrades are less expensive over the Internet as well, and the new features usually make the software more productive.

Real-time consultations with other dentists on multidisciplinary cases. Other specialists can be given password access through the Citrix software to view patient images and x-rays at the same time I am seeing them. We can talk about proposed treatment plans or changes without wasting time traveling or rushing somewhere for lunch.

Internet study club. I am a member of an Internet study club that has been a good source of information for the past few years.

Filing taxes online. I set up accounts to pay my federal 940, 941 (Electronic Federal Tax Payment System), and state taxes online. Combined with direct withdrawal from my business checking account, this system saves even more time.

Office Staff Uses

Inventory control. We use Office Inventory Ordering[§] for inventory control and order processing. This software tracks all purchases, makes comparison shopping easier, and processes orders faster. You just click on the product, enter the quantity needed, and click a button to e-mail the order to the sales representative or company. Now we can quickly view all product costs at once instead of sifting through paper invoices.

Credit checks. Equifax^{§§} has set up a service to perform credit checks over the Internet, providing a quick risk assessment of new patients to help us determine financial arrangements. The

[†]Cadent, Inc., www.orthocad.com.

[‡]Citrix Systems, Inc., www.citrix.com.

^{††}Symantec Corporation, www.symantec.com.

^{‡‡}Microsoft Corporation, www.microsoft.com.

[§]FoxFales, Inc., www.foxfales.com.

^{§§}Equifax, Inc., www.equifax.com.

office network allows credit checks to be made from any computer, which is convenient when you have two exam rooms, two treatment coordinators, and two front-desk employees.

Insurance benefit checks. Ten of our most commonly used insurance companies display their benefits on the Internet. Accessing insurance information from these companies is a snap and saves considerable time holding on the phone. Our hope is that more insurance companies will add this service in the near future.

Conclusion

To summarize how I use the Internet in my office:

- Pt Interactive and Ortho Sesame programs handle patient communication, e-mailed appointment reminders, at-home access to ledger cards, and group e-mails to patients.
- Orthotrac Treatment Card allows patient information to be entered and viewed from any Internet connection.
- Dolphin Imaging provides efficient storage of and access to patient images.

- OrthoCAD allows easy manipulation and viewing of digital study models.

- Citrix software enables remote access from my home, for professional help from around the country, for communication with my staff from home and on vacations, and for correspondence with other dental professionals about specific cases.

- Office Inventory Ordering software makes it easier to process orders and manage expenses.

- Various websites are used for credit checks, determination of insurance benefits, tax filing, and computer upgrades.

These electronic products have completely changed the way I manage scheduling, patient records, treatment planning, computer technology, supply ordering, communication, insurance, and the office in general. They have improved our practice efficiency while allowing more effective and convenient communication with our patients and their families.

ROBERT S. HAEGER, DDS, MS
24909 104th Ave. S.E. #203
Kent, WA 98031
DrHaeger@mybraces.net