Alvin Toffler, the great business futurist, has described a third wave of human evolution based on the mind—what pundits call the information or the knowledge age—and powerfully driven by information technology. Dentistry is a hands-on profession, but the engines that run this “small business model” are very amenable to the new economy driven by Internet technologies.

Internet-based services such as insurance submissions and outsourcing are already in place south of the border and are literally waiting in the wings here in Canada. The potential for electronic practice management using operating systems run off the Internet (Application Service Providers), and the enormous potential for enhancing patient loyalty by using the Internet for education and information, all translate into a better managed and cost-effective practice.

Connectivity begins with nothing more than an e-mail address for the office. Once it is recognized that the Internet is simply a sophisticated telephone system with a global party line, its perceived value increases manyfold. More Canadians are connected to the Internet than in any other country. The client base that is connected is the same client base that visits the dentist twice a year. Appointment confirmations, re-evaluation notifications and marketing tools such as newsletters are basic functions of any practice that can be performed with dramatically reduced cost and maximized efficiency in an Internet-based business model.

The American Dental Association (ADA) has recognized the inherent value of Web site marketing. It assists its members in the creation of office Web sites and lists these in a directory on its home page (www.ada.org) for potential client perusal. There is no end of commercial competition among dental societies to do the same. In addition, the ADA offers discount Internet access for its members and has established an ADA Electronic Commerce Shopping Mall featuring a wide array of discounted products and services. The ADA also provides an online discussion forum currently available in Canada only through the volunteer CANADEN project (www.canaden.com).

**Internet-based EDI**

In communications, efficiency and control are key. With the added image transfer capacity of electronic communications, clarity and accuracy are also important. An Internet-based electronic data interchange (EDI) system would allow for all of these, and serve to enhance claim submissions.

A CDA committee, the CDAnet Task Force, is currently trying to determine a mechanism for Internet insurance submissions that will include digital imagery. This approach, however, is akin to putting the cart before the horse. Without connectivity in all dental offices and without the fundamental capacity to digitize hard copy images, no Internet-based EDI system will ever be widely used. As such, acceptance by the insurance industry will flounder as dual systems (not the most cost-effective way of doing business) will be necessary for adjudication.

The mechanism for electronic image transmission and insurance claim submission is very much in place. Secure servers receive submissions from client offices that are protected by encryption and firewalls. Once a claim is received, the insurance consultant can download it from the secure site, thereby avoiding any file corruption that might occur in a direct communication.

Of course, it doesn't matter whether there is a mechanism in place if practitioners can't connect to the Internet archive site. That can be remedied, however, if CDA negotiates with a major service provider in this country to ensure connectivity for all member dentists at a discounted rate based on aggregate usage. CDA can promote Internet use and assist in its installation in dental practices, with substantial positive outcomes.

**Electronic Archiving**

If there is an inherent flaw in print media, it is storage and the absence of an effective “search mechanism/engine.” Archiving clinical, insurance and policy material in a .pdf format is already being done on the CDA Web site. Searching for information is simply a matter of typing the author's name or a subject heading into a search engine and retrieving it, something not possible with a stack of journals.
Connectivity would ensure broad-based information dissemination and access to more resources.

**Continuing Education**

While there will never be an alternative to the camaraderie of conventions, study clubs or society meetings, the Internet can maximize the education component of these forums by providing information in advance of these meetings and extending follow-up through discussion groups afterwards.

**Conclusion**

Insularity is the hallmark of the professional dental environment. Yet with Internet connectivity, the profession can come together like never before. If viewed simply as a technically efficient adjunct to traditional communication formats, the Internet and its ancillary functions will become the “mortar” linking the profession. CDA needs to recognize this potential, acknowledge it in its mission statement for the new millennium and pursue it as the basis for the “business model” of today’s dental practice.

Connectivity will have an impact on quality assurance and the pursuit of excellence in dentistry beyond anything ever seen before. It will also help link a geographically dispersed profession. I urge CDA to take a very small step as the initiation of an enormous voyage of application and discovery. 

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The views expressed are those of the author and do not necessarily reflect the opinion or official policies of the Canadian Dental Association.