

How to turn reports into revenues



BY DR. LARRY EMMOTT

Users of practice management systems collect vast amounts of data as they track treatments, finances, and other information. Dr. Larry Emmott explains how to mine this data for revenue-generating reports, giving the following three basic reports as examples:

Pending treatment (page 38)

A report of all patients with treatments pending. It can show the treatments, whether treatment appointments have scheduled, and patients' phone numbers. Use this data to reactivate patients.

Income tracking (page 40)

This report can track treatments generating the most income (as crown and bridge) to ones generating often overlooked income (as periodic recall exams). Use it to negotiate with insurance companies.

Insurance tracking (page 42)

This reports tells you with which insurance companies you do the most business and which pay the quickest. Use it to make choices about future dealings with carriers.

See also: **database marketing tips** (page 40) and **database design** (page 43).

—The Editors

By Dr. Larry Emmott

Computers may not do everything well, but one task they perform very efficiently is gathering electronic information or data and relating it to other electronic data.

When you use a computer in the office, you will collect data as a byproduct of doing business. Using a computer to chart treatment, schedule appointments, and track finances creates vast amounts of data a dentist couldn't possibly collect by hand. Further, the computer can collect this data faster, more accurately, and much less expensively than could a human being.

In addition, using a process often called "data mining" to find patterns in data enables doctors to use the collected data to monitor how the practice is doing and to increase office productivity.

(Note: For more about databases and data mining, see "Database terms," right.)

When managing information in the dental office, keep in mind the classic computer adage that always applies to the data you input: garbage in, garbage out. In other words, the information the computer gives you in a database report is only as good as the data you originally put in.

To get the most out of data mining, or as some call it, "information management," the dental office should use a computer to track every step of a treatment process. This includes charting or tracking treatment planning, scheduling, billing, payments, insurance, treatment notes, and all the rest. Fortunately, this is easy to do with any good practice management system.

In fact, practice management systems are set up to support a single-entry concept in which a treatment is entered **one time** at diagnosis and then will travel seamlessly and electronically throughout the rest of the treatment process.

The type of data that a practice management system can examine and how the management system relates it to other data is almost unlimited. The result is that the dentist now can examine virtually any aspect of a practice using the data collected with the single-entry procedure.

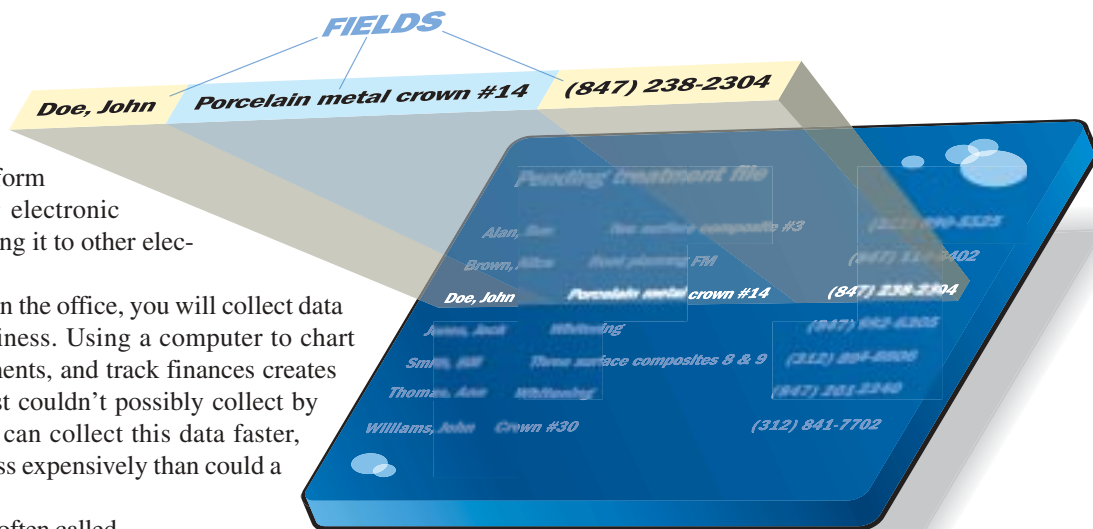
Described below are three basic reports—pending treatment, income tracking, and insurance tracking—that demonstrate the information-management process along with examples of the income or savings each type of report can generate.

Pending-treatment report

Possible income: \$48,000

Management consultants tell us we all have fortunes in our filing cabinets. They are referring to treatments we have diagnosed that patients have yet to schedule.

It is possible, of course, to find missed or pending treatments by doing a hand search of charts. However, a hand search for



DATABASE TERMS

Here are definitions of some common database terms:

DATABASE: A collection of information organized in such a way that a computer program can quickly select desired pieces of data. Think of a database as an electronic filing system.

For example, a single piece of data, such as a patient's first name, is called a database element and resides in a data "field" (see illustration above). Another data field might be a patient's area code and telephone number; each would be a different database element.

Traditionally, the term database has been used to refer to the actual data collected and to the data filing system.

DATABASE MANAGEMENT SYSTEM: To access information from a database, you need a database management system. This is a collection of programs that enables you to enter, organize, and select data in a database.

Increasingly, the term "database" is being used as shorthand for "database management system."

DATA MINING: a hot buzzword for a class of database applications that look for hidden patterns in a group of data. For example, data mining software can help retail companies find customers with common interests. True data mining software actually discovers previously unknown relationships among data.

Source: Webopedia (www.webopedia.com); Dr. Larry Emmott

pending treatments is tedious and takes a great deal of staff time; in other words, it's expensive.

Once you start to enter all treatment in the computer at diagnosis, though, a pending-treatment search becomes simple and inexpensive.

You just ask the computer: "Give me a list of all treatment that has been diagnosed but not yet been completed."

However, with good information management software, you can do even more. You can ask the computer to do several tasks, starting with the one just mentioned, as follows:

- Provide a list of all patient treatments that have been diagnosed but not completed.
- Check the electronic appointment book to make sure the patients with pending treatments haven't scheduled an appointment.
- Check the financial status of these patients. Do they have unused insurance benefits for the year?
- Access the family information to get the patient's phone number.
- Make a list of all pending treatments with the most expensive pending treatment plans listed first. Then, include with the report a telephone number for each of the patients needing pending treatment.

Wow! Now you have a list that can be really useful. The patients will get their needed treatment, and the office will increase production.

If this data-gathering process can reactivate just one patient a week (for 48 weeks), and the patient just schedules treatments for his or her insurance limit

(for example, about \$1,000 a year), that translates to \$48,000 extra revenue per year for the dental office.

To create the above report, the management software must be complete and integrated. In other words, the various software modules must communicate with each other.

If the modules aren't integrated, or if the office staff fails to enter treatment at diagnosis or to use the electronic book, then the report has much less value.

Continued on page 40

Continued from page 38

Income tracking report

Possible income: \$32,000

In addition to producing a pending-treatment report, the software should be able to track income. This means asking the computer to, "Show me the money!"

In other words, the computer should be able to answer these questions about your practice's income:

- Where does the practice's money come from?
- Which services are performed most often?
- What creates the most income per hour?

To get this kind of information, you need to track all treatments done, how much is charged for each of them, and how much time each treatment takes. Again, various management software elements—that is, treatments, scheduling, and finances, must be integrated.

Continued on page 42

DATABASE MARKETING TIPS

Here are some tips from Dr. Emmott on how to use your practice database as a marketing tool. Once you start to accumulate a database on your patients, you can use it to market to them more effectively. Here are some ways to use your data to find patients with common interests or outlooks:

SORT BY AGE. A simple example of database marketing would be to sort your recall lists by age. Then send a recall card to each age group designed to appeal to their interests. Older adults would get one kind, children would get another, and everybody else would get yet another. Each group sees the office as tuned into and appealing to them because you present an image, even in something as simple as a recall card, which appeals to them.

SEGMENT BY MOTIVATIONAL FACTORS. A more advanced example would be to segment patients based on psychological or motivational factors. For example, you could designate the prime motivator for people as one of four factors: cost, appearance, health, or fear. Then, address that person's primary motivator on a recall card in the following ways:

COST:

Dear Mr. Patient,
To keep the cost of dental treatment low and reduce the likelihood of expensive treatment in the future, regular checkups are required.

APPEARANCE:

Dear Mr. Patient,
To keep your teeth looking and feeling their best with a bright and pretty smile, regular checkups are required.

HEALTH:

Dear Mr. Patient,
To keep your mouth healthy and reduce the change of cavities or gum disease, developing regular checkups are required.

FEAR:

Dear Mr. Patient,
To keep dental treatments quick and easy with a minimum of discomfort, regular checkups are required.

SORT BY SPECIFIC INTERESTS. Another more sophisticated approach would be to search the database for people with specific interests and then send them a marketing letter. For example, search for all people who have had their teeth whitened in the last two years. Analyze them: What age group are they in? What are their motivations? Then send a letter promoting whitening to all people in your practice with similar motivations or in similar age groups.

Or, search for all children under 16 and send their parents a letter on sealants. Or, on a more sophisticated level, have the computer eliminate children who, according to the treatment-complete database, already have had sealants.

—LE

Continued from page 40

When I ran this type of income-tracking report in my office, I was surprised at the results. As expected, the procedures that brought in the most income to my practice were crown and bridge. However, what I didn't expect is that the simple periodic or recall exam brought in a significant amount of income as well.

For example, in a typical office (where the staff works 200 days a year), if a hygienist sees only eight patients a day, and the doctor charges \$20 for the simple periodic exam, that equals \$32,000 a year in income for the recall exam.

Consider this, the first thing most insurance companies ask a dentist to do when he or she signs a contract is to give away periodic re-calls.

Many dentists look at the exam fee and figure, "It's only \$20. I can afford to give it away."

That's because they haven't run the numbers.

You can bet the insurance companies have run the numbers; if they can get the dentist to give away \$32,000 a year, they win—you lose. In the information age, the person who has the data wins.

Insurance tracking

Possible savings: \$50,000

After you create pending treatment and income-tracking reports, track your insurance costs. With an insurance-tracking report you can ask the computer:

- Which insurance company do I do the most business with?
- Which companies pay the quickest?
- How much income do I write off to a preferred provider organization (PPO)? Can I afford to drop or add the XYZ company PPO?

If you are trying to decrease the influence of insurance on your practice, these numbers can help you make good choices. For example, here is a typical situation (Beware, the next few paragraphs include math!):

This particular office was producing \$500,000 per year. The office found that 25% (\$125,000) of the procedures they performed for a year were covered by the XYZ company's PPO; however, XYZ patients only accounted for 15% (\$75,000) of the income, not 25%. The office was losing 10% (\$50,000) a year of the revenue they produced to XYZ withholds and write-offs due to non-covered services and lower fees.

In this case, if the office decided to drop the XYZ contract, and 40% of the XYZ patients left the practice, the practice would still break even ($\$125,000 \times 60\% = \$75,000$).

On the other hand, if you find that 50% of the practice income comes from XYZ-covered patients, it is probably not a good idea to leave XYZ until you have built up the non-insurance side of the practice.

Insurance tracking will help even if the office is content with the insurance carrier. For example, with insurance tracking you can easily follow up on unpaid practice

claims. First, check to see if the services were attached to a claim or if pre-treatment estimates had been sent. You can also check utilization with a dental HMO. Utilization reports track the number of patients seen and procedures compiled for a certain plan. Some HMOs even require utilization reports from participating dentists.

About ROI

Adding up the possible income or savings seen in examples from just the above three reports equals \$130,000; that is, pending treatment (\$48,000), income tracking (\$32,000), and insurance tracking (\$50,000).

As noted previously, to gather the nec-

essary information and create the three reports easily, a dental office will need good management software and a complete network of computers, including computers in treatment rooms.

For a typical dental office with one doctor and three treatment rooms, purchasing software and computers will mean an

initial technology investment of about \$20,000. The resulting return on investment, though, is huge.

To generate the optimum amount of data for reports, doctors also need to check their practice management system's database structure to see what type of flexibility they have in generating reports;

for more information on what the elements of a database, (see the "Database design" sidebar, right).

Other database reports

There are many other types of reports that you may find valuable once you start to

Continued on page 129

DATABASE DESIGN

Once you understand the power of the data you collect as a byproduct of doing business, you can be creative in relating one piece of information to another. The only limit may be your database structure. Database is one of those computer geek words often

tossed about with more than one meaning. Basically, think of a database as an electronic filing system, and a database management system as the collection of programs that enables you to enter, organize, and select data in the database.

SELECTING A DATABASE: WHAT TO LOOK FOR

In selecting a database management system for your dental-office data, consider the following elements:

1. Fully relational database. Ideally, the database should be a "fully relational database," meaning that a user can relate any data element to any other data element. The standard relational database uses structured query language (SQL). "SQL is a standardized query language for requesting information from a database," according to Webopedia, an online encyclopedia. If your management software uses a SQL database, it will allow you the most flexibility when creating reports.

2. Custom report generator. The second best database system is a custom report generator, a software component that allows you to choose database elements from an available list and collect them into a report. The limiting factors are which database elements the report generator offers and how you can relate them to each other. In other words, you are limited to database elements the report generator offers.

3. Fixed reports. The third option, and the least desirable, is fixed reports: the software limits data access to pre-selected, hard-coded report formats. These reports may be fine, but they do not allow users to do any serious data mining.

WHAT TO ASK MANUFACTURERS

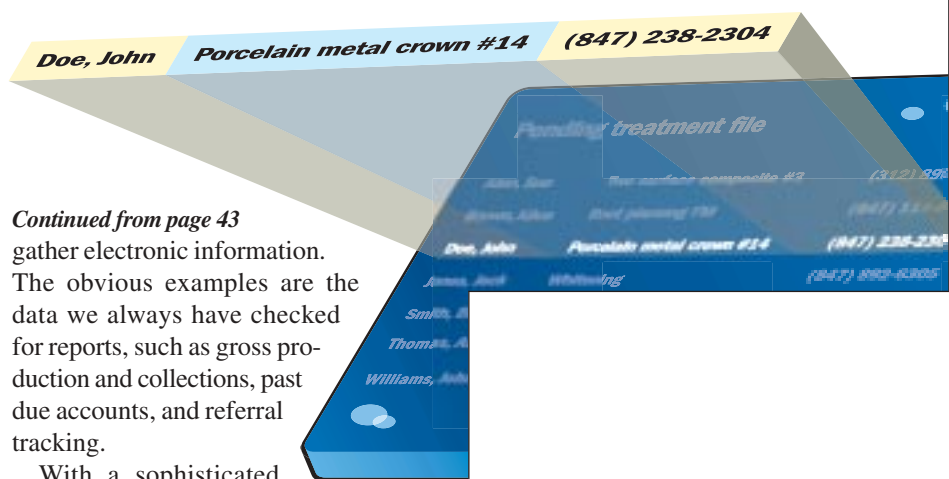
Asking software vendors what database structure they use probably won't be helpful. Rather, you should ask them:

- Do they use a relational database?
- Can users make custom reports?

If the vendor says, "Yes," test it out. Ask them to show you something that isn't on a standard report but would have value to anyone managing a dental office. For example, ask them to show you how much income was generated last year from tooth whitening and what the age ranges of the whitening patients were? Or, ask them to show you how much treatment is diagnosed on average for each new patient? Then, assess what the vendor tells you. Can they give you the information you requested? If yes, is it easy to come by or is it a time-consuming and difficult process?

Oftentimes, our computer systems have vast amounts of stored data, but they just won't allow us to see it. It is our data. We own it, but we can't use it. Whether or not you can use the data is usually a factor of database design.

—LE



Continued from page 43

gather electronic information. The obvious examples are the data we always have checked for reports, such as gross production and collections, past due accounts, and referral tracking.

With a sophisticated computer system you can monitor treatment diagnosed. The information generated will tell you:

- The average amount of treatment you diagnose
- Which procedures you deliver most often
- How much of the work you diagnose is accepted
- How much time you spend on certain procedures
- Which insurance companies pay the fastest
- Which local employers most of your patients work for

You also can track down patients who haven't been into your office in more than a year. You can even combine the patient data with word processing or e-mail to produce marketing letters to selected patients (see "Database marketing tips," page 40).

In fact, the data and what can be done with it can easily become overwhelming. Some dental offices see how overwhelming it is and say, "That's just too much. I can't use that. I don't need that."

However, they fail to realize that the data is a byproduct of doing business, and that it is collecting, understanding, and using data wisely that is at the heart of the information-automation revolution.

It may certainly seem overwhelming but understanding and using information is the essence of the fundamental changes sweeping dentistry. In the future, those who understand and embrace the information age will profit from it...for the future is coming and it will be amazing! **DPR**

Dr. Larry Emmott, a recognized authority on dental technology in America, is a practicing general dentist in Phoenix, Ariz. He also is an award-winning professional speaker, a featured instructor at the Las Vegas Institute, and a member of the American Academy of Dental Practice Administration. He has written hundreds of articles on dentistry, computer use, and management. Since 1995, he also has written a monthly electronic newsletter, Emmott on Technology, showing dentists how to use technology effectively. Dr. Emmott offers regular hands-on programs to selected dentists in his Phoenix office. At these seminars, you will receive personalized advice on setting up your office to maximize your high-tech future. To find out more, call (602-279-1641), or check Dr. Emmott's Web site at www.drlarryemmott.com.