



PRACTICE MANAGEMENT NOTES

A Supplement to the AAOMS Today Newsletter March/April 2008

The Electronic Medical Record and the future of dentistry

By Bruce Lieberthal, DDS, director of Product Management for Henry Schein Practice Solutions

The Electronic Medical Record (EMR) is an integral part of the medical standard of care—today and in the future. EMR is sometimes referred to as Electronic Dental Record (EDR) or Electronic Health Record (EHR). This key feature guides you through clinical record-keeping in a standard SOAP format (subjective, objective, assessment, plan). It allows key patient information to be centralized—demographic, medical/dental, social and financial—all within your practice management software. EMR eliminates multiple paper charts and provides controlled, secure and instant digital access to comprehensive information. Some EMRs incorporate a range of supporting technologies to become a fully integrated component of the practice management software, thereby allowing even more access to vital information at the point of care. This information is accessible from any secure workstation, so there are no interruptions during the patient visit to retrieve information. Everything is at your fingertips.

The Evolution of EMR

EMR has evolved from just an idea in the 1960s into a technical application that is changing the way the medical and dental fields operate. Increasingly the EMR is viewed as a mechanism to address patient safety issues and the storage, transfer and security of medical information. HIPAA compliance is paramount to the successful implementation and adaptation of EMR.

Government regulations and public policy indicate that the adaptation and implementation of Health Information Technology (HIT) set the foundation for healthcare reform. Leading the way for reform is EMR's universal use. The Department of Health and Human Services projects that the majority of Americans will have an electronic medical record by 2014; the federal government is also set to make EMR a mandated practice in health care sometime between 2011 and 2014.

This HIT mandate alleviates many issues involved with traditional, paper-based medical records:

- Data can only be viewed/used by one person at a time.
- Data may be illegible or misinterpreted.
- Data can be lost—pages can fall out of the file—and charts can be misplaced.
- Data can be difficult to locate in large charts/files.
- Data cannot easily be cross-referenced across charts.
- Data is not readily structured.
- Data does not easily support point-of-care decision-support logic.
- Important and often subtle patterns in the data are not apparent.
- Availability of electronic connectivity to other technologies and databases does not exist.
- Data is not secure.
- Data is not widely available.

EMR represents a more evolved way of recording patient information. It is a completely digital format, where the doctor is able to assess outcomes and data points, not just create a textual, paper record. Information can be stored and shared with patients and other consulting healthcare providers on a particular case, including the exchange of information via the Internet.

The evolution of EMR also enables the use of multiple digital technologies. It is expandable, and easily incorporates other technologies. EMR is one of many digital technologies that are advancing the practice of medicine.

A digital practice begins with a comprehensive practice management system that encompasses EMR technology. Without the electronic medical record, the records exist

on paper, and true digital efficiencies cannot be realized. Combined with other embedded technologies, such as the capabilities to verify insurance eligibility online, run credit card payments, etc., EMR can permanently transform your clinical world.

History of Medical/Electronic Record Keeping

Historically the patient medical record has required significant time to complete and has been almost exclusively on paper. This paper-based diary has logged medical events as they occur, along with patient data in various charts and forms.

In the 1960s, a physician named Dr. Lawrence L. Weed first described the concept of computerized, or electronic medical records. Weed described a system to automate and reorganize patient medical records to enhance their utilization and thereby lead to improved patient care.

Dr. Weed's work formed the basis of the PROMIS project, started in 1967 at the University of Vermont; it was a collaboration among physicians and information technology experts, to develop an automated EMR system. The objectives were to develop a system that would provide timely and sequential patient data to the physician, and enable the rapid collection of data for epidemiological studies, medical audits and business audits. The group's efforts led to the development of the Problem-Oriented Medical Record, or POMR.

In 1970, the POMR was used in a medical ward of the Medical Center Hospital of Vermont for the first time. At this time, touch screen technology had been incorporated into data entry procedures. Over the next few years, drug information elements were added to the core program, allowing physicians to check for drug actions and interactions, dosages, side effects, and allergies. Diagnostic and treatment plans for over 600 common medical problems were also devised.

During the 1970s and 1980s, various academic and research institutions refined electronic medical record systems. The Technicon system was hospital-based, and Harvard's COSTAR system had records for ambulatory care. The HELP system and Duke's "The Medical Record" are examples of early inpatient care systems. Indiana's Regenstrief record was among the earliest combined inpatient and outpatient systems.

During the technical boom of the 1990s, advancements in computer and diagnostic applications helped spur the growth of electronic medical record systems in medical practices. Today, more and more practices are

implementing electronic medical records. The future of medicine is here, now. But how effective is this tool, and how widely have dental practices picked up on it?

The Future of Medicine and Dentistry: Advancing the EMR

The advent and implementation of digital technology is driving the uniformity of the gathering, storing and using medical data, and applying pressure to clinical data keeping. Dentistry lags behind medicine in terms of the quality of record keeping. Medical doctors must comply with stringent record keeping regulations, even on paper. They must be careful in recording data because the stakes are high. Lives can be lost. If data is improperly recorded and something goes wrong, there may not be an accurate record to refer to. Dental practitioners do not yet face this level of pressure to comply, although changes in this direction are just a matter of time. By mandating compliance for the dental community, we can improve the quality of care in the following ways:

- Data/record accuracy for doctor protection
- Data/record accuracy for patient protection
- Improved treatment standards and quality of treatment
- Complete records supporting better point-of-care decision making
- Sharing/cross-referencing of data by consulting doctors
- Industry associations and organizations to realize higher levels of efficiency
- Smoother processing and filing of medical claims
- Clearer communication between doctor/patient/insurance provider
- Quicker claim/payment processing by insurance companies to providers
- Drastic reduction of administrative costs
- Improved security
- Improved data access
- Improved connectivity to other technologies and devices
- Improved detection of data patterns
- Improved ability to study outcomes

The advent of new technologies responsible for improving patient care requires a digital framework. The key is structuring the process of treating patients in a uniform way. EMR walks the doctor through the process of treating a patient, providing a natural flow to both the office visit and the gathering and storing of data.

The electronic medical record can be the bridge between medicine and dentistry. It was originally developed within medicine, and now is more widely used (at a dismal 15% to 18%) by physicians. The dental profession is

coming to embrace it, and the specialty practice is the vehicle and the leader. As an oral and maxillofacial surgeon, your role is pivotal in the implementation and perception of EMR in the dental community. EMR helps the practitioner manage data, streamline patients' visits and communicate with referring doctors. As an oral and maxillofacial surgeon, you already live in a medical world, and this idea is not new to you; you are already leading for the industry.

Part of a Bigger Picture

EMR is paving the way for the eventual gathering and storage of all patient medical records—medical, dental, vision, specialist—into a single, universal, and uniform national format. The federal government is working to reduce ambiguous paper records, and make all medical histories as digitized as possible, as quickly as possible, thereby creating a national healthcare medical record. This mandate goes beyond simply moving the data from a paper format to a digital, computerized format. The problem is that paper records are not uniform. There is no consistency between how one doctor enters data to how another doctor performs the same task and records it. The idea is to get the recorded content unique to the doctor and patient, but handled in a uniform format that can be utilized on a national scale.

The national medical record is the future. Eventually every patient will carry a card and virtually all medical information about a patient—including histories, exams, tests, prescriptions, procedures and notes—will exist in one secure healthcare record, carried in the form of a card much like a credit card. This card will be swiped at the visiting doctors' office and the relevant portion of the patient's medical record will load into the office's computer practice management system. Eventually there will be an online database for each of us. Physicians,

dentists, pharmacists, and psychologists—any practitioner will have secure access to relevant portions of our medical history.

Every form a patient has ever filled out will be available and accessible to doctors and medical staffs treating the patient at the next visit, even if it is at a different doctor or medical facility.

The data must be secure, private, uniform, consistent and expandable. HIPAA compliance is vital to the successful utilization and implementation of this technology. There is room for abuse. We must make the records portable while protecting the privacy of the doctor/patient relationship.

Pioneering Responsibility: the Wave of the Future

As technology pioneers, Henry Schein Practice Solutions (HSPS) is at the forefront of advancements in practice management solutions. HSPS is creating and improving the electronic medical record, and working to build a medical record within a national technological framework. Henry Schein Practice Solutions is establishing the foundation that will spearhead reform. We aren't just creating a tool to schedule appointments or post a transaction. EMR and other expandable technologies are changing the face of healthcare. For those of us in the midst of doing this, it gives us great purpose. We are a part of something groundbreaking that will ensure the future of quality of patient care.

These are exciting times and we have a responsibility to develop and adopt technology. AAOMS has been at the forefront, moving forward the OMS practice and the practical use of the electronic medical record.

This is number 102 in a series of articles on practice management and marketing for oral and maxillofacial surgeons developed under the auspices of the Committee on Practice Management and Professional Allied staff and AAOMS staff. *Practice Management Notes*, from 2002 to present, are available online at aaoms.org.

All articles in *Practice Management Notes* are published only with the consent of the authors, who have expressly warranted that their works are original and do not violate copyright or trademark laws. AAOMS is not responsible for any violations of copyright/trademark law on the part of these authors.



Did you miss one of these Virtual Seminars?



Audio CDs are available for the following programs:

Compliance and Reimbursement Strategies for the OMS Office

originally presented on August 30, 2006

Stacie L. Buck, RHIA, CCS-P, LHRM

This virtual seminar will provide a discussion of documenting medical necessity as well as common E/M documentation deficiencies and tips to correct them. The session will wrap up with how to identify audit “hot spots” and ways to implement an effective auditing and monitoring program to protect your practice from overpayments.

Code: AOM-11596

Keys to Hiring and Maintaining Quality Staff

originally presented on May 17, 2006

Crystal Reeves, CPC, CMPE

This virtual seminar provides step-by-step guidance to develop an organization and build a staff that functions smoothly and efficiently. The practical tools and techniques discussed will prepare the participant to take a fresh look at staffing, hiring, training, and assessment. Participants will be better prepared to identify problems and develop solutions within their OMS Offices.

Code: AOM – 11595

For more information or to purchase your CDs,
visit www.krm.com/aaoms

Questions?

Please contact Beth Hayson at 847/678-6200; ext. 4357
or bhayson@aaoms.org