

Dental Records: Best Practices for Information Management and Retention



Course Author(s): Wilhemina Leeuw, MS, CDA

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Students, Dental Assistant Students

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• The author reports no conflicts of interest associated with this course. She has no relevant financial relationships to disclose

Introduction

Dental records are a significant component of completing the patient's standard of care. Dental records have evolved significantly due to federal laws and technological advancements. The record has been transformed to an electronic record that must be effectively maintained, properly retained and ultimately protected on the behalf of the patient.

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Overview

Dental records are a significant component of completing the patient's standard of care. Dental records have evolved significantly due to federal laws and technological advancements. The record has been transformed to an electronic record that must be effectively maintained, properly retained and ultimately protected. The benefits of complete documentation results in patient confidence and portability of their record as well as reduced liability for the dental office.

Learning Objectives

Upon completion of this course, the dental professional should be able to:

- Compare the differences between a paperless and a chartless practice.
- Identify the owner of the dental record.
- Contrast the difference between a subjective and objective statement.
- Describe basic focuses of the four HIPAA standards.
- Justify the importance of keeping original patient records.
- Illustrate and translate the use of office standardized and common treatment and charting abbreviations.
- Discuss the advantage of comprehensive documentation versus incomplete treatment entries.
- List the differences between vital, important, useful and non-essential documents.
- Outline necessary documents for a complete patient dental record.

- Describe how to correct an incorrect charting entry.
- Relate the difference between business and clinical dental records.
- Describe the cabinetry styles of paper records.
- Describe the importance of dental record storage and back up.
- Explain the retention of dental records.
- Employ the proper transfer of dental records between locations and dental offices.

Glossary

alteration – A change or revision in a record.

breach of contract – Failure to act as required by a contract.

CAD/CAM – A prosthodontic technology for dentistry that used "computer-aided design" and "computer-aided manufacturing" to create in-office restorations; ex. crown, inlay, onlay.

CBCT – stands for cone-beam computed tomography; renders a three-dimensional image of the patient's oral cavity to include teeth and jaw as well as ears, nose, and throat

chart – A portion of the complete patient record; the chart receives documentation including dates, treatments, radiographs, instructions, medications, laboratory needs, referral information, and recommended recall.

chartless – A practice that continues to use paper forms but they are scanned into the electronic record and then shredded.

clinical – Pertaining to the chairside treatment of the patient.

cloud computing – The "cloud" is a metaphorical term for the internet; this type of system uses several internet servers to save and secure data, and this data can be accessed from any device with internet access.

confidential – Information to be kept private and secure.

contract – An agreement between two or more parties that is enforceable by law.

current dental terminology (CDT) – A list of descriptive terms and identifying codes maintained by the American Dental Association for reporting dental services and procedures to dental benefit plans.

EHR – Acronym for electronic health record.

ePHI – Acronym for electronic protected health information.

financial records – Kept separate from the treatment records, financial records contain the patient information regarding their billing and payments for services rendered.

HIPAA – Acronym for Health Insurance Portability and Accountability Act of 1996.

implied consent – Consent that is established by actions, not written words.

informed consent – Voluntary agreement by a person after knowing sufficient details to make an informed decision to accept treatment.

informed refusal – Voluntary agreement by a person to refuse treatment after knowing sufficient details to make an informed decision.

malpractice – Professional negligence.

negligence – Failure to provide a reasonable level of care.

Notice of Privacy Practices – Required under HIPAA; written notification informing patients of the office's policies related to the use and disclosure of their protected health information.

objective statement – Factual information; not influenced by opinion.

obliterate – To destroy completely, leaving no trace.

Palmer Notation System – Also known as the Symbolic Numbering System, this is a tooth numbering system used often by orthodontic practices

paperless – When a dental practice uses only electronic records.

patient record – The patient record is comprised of the patient information forms, clinical treatment forms, financial transaction forms, radiographs, and study models.

Privacy Contact – Required under HIPAA; the designated individual in the office responsible for providing information, receiving complaints, and handling the administration of patients' rights.

Privacy Officer – Required under HIPAA; the designated individual in the office responsible for developing and implementing the policies and procedures necessary for HIPAA compliance.

PHI – Acronym for protected health information.

scrutiny – A searching examination or investigation.

SOAP Notes – A charting acronym which stands for entries that follow Subjective, Objective, Assessment, and Plan notations

Standard of Care – The legal duty of a dentist to exercise a degree of skill and care that would be exhibited by other prudent dentists.

subjective statement – Information that is influenced by personal feeling or opinion.

TCPA – Telecommunication Consumer Protection Act; protects consumers from excessive contact via phone calls and text messages.

teledentistry – Using technologies such as phone, tablet, and computer to deliver virtual dental education and services.

third-party back up system – Using an office site company to back up and secure data.

Universal Numbering System – A tooth numbering system to identify a specific tooth

Electronic versus Paper Documents

Most dental practices have started the process toward complete or hybrid electronic dental records (EDR). While the equipment necessary to make a change from paper to electronic format requires a considerable investment, paper forms still require purchase in several cases and must be continually ordered, generated, and protected from the public and elements for several years in large storage containers or shredded for patient protection. Even then, many offices report that money has been saved when moving to electronic record keeping, including the money and time lost in submitting insurance claims and pretreatment claims. The cost of ordering and maintaining physical appointment books is saved with the electronic software calendar with screens that can be accessed from several chairside stations and protected remote locations. Access to electronic inventory management can save money and time if the dental team has been trained to use it effectively. As technology has advanced, the way that information is secured and encrypted has reduced in price due to cloud-based computing.

Beyond the advantages to the dental practice, having electronic documentation for all patients can be beneficial to a patient's overall health and medical treatment. According to the Regenstrief Institute and Indiana University School of Dentistry, the ability to link medical and dental records could improve all treatment outcomes. Having access to a patient's medical



Figure 1. Computerized Schedule.

history and knowledge of conditions and current medications could predict risk for healing or excessive bleeding. In reverse, a healthcare professional having access to dental treatment could alert them to oral issues such as oral ulcerations and the prescribed treatment which may involve prescriptions and additional follow-up visits. ¹¹

Once the office invests in the equipment, the ability to expand how treatment is offered also develops. The ability to incorporate an intraoral camera and CAD/CAM for in-office crown design and creation changes how treatment planning can be discussed and scheduled. The costs involved with digital radiography equipment can be directly compared to the costs invested in traditional film, processors and the processing solutions, film mounts, and the time required to process the film. Depending on the patient's signs and symptoms, the periapical, bitewing, panoramic, or cone beam computed tomography (CBCT) dental image captured can be magnified for more detailed diagnosis. Should the patient require it, the ability to electronically forward images to a specialty practice or insurance company is an additional time and cost-saving benefit. Additionally, the ability to connect with patients on a virtual basis has become a viable application of technology.

Before a dental practice software is chosen, all of the applications available and how different dental team professionals plan to utilize them should be researched. Practice goals that include strategic planning with technology must be discussed so the full potential of the purchase is eventually realized. Finally, the practice owner must decide on a third-party or a cloud-based system as this will determine how the practice plans to back up patient and business data and secure the private file information. As the dental team researches the options for dental software and the hardware to operate it, issues to consider involve the substantial initial costs, continuous software updates, a review of the company's tech support protocols, and potential for equipment expansion. At certain points, training requirements should be expected for every person on the dental team using the technology for their work responsibilities.

The Importance of the Dental Record

Dental records have changed significantly due to federal regulations and advancements in technology. Not many years ago, a patient record may have consisted of paper forms held together in a paper filing chart with written notes, some radiographic films, and maybe a few poured casts were cross referenced to a storage area of the lab. The record has now transformed to an electronic document including digital images and photographs stored in a computerized system while all under the protection of security standards and privacy rules.

An EDR also contributes to the capabilities of teledentistry. Teledentistry involves live video meetings and correspondence between dentist and patient using mobile electronics such as phone, tablet, and computer. Connectivity and communication between dental professionals is enhanced with the ability to securely store and forward patient records.¹¹

The dental record contains personal and dental treatment information generated by the practice. The original documents of the record are owned by the dental practice with the dentist of the practice considered to be the legal guardian. The patient can have access to, and request copies of, this information at any time, even if they have a monetary balance with the practice. The original documents must remain with the practice and the requested copies must be sent within a reasonable time frame. Should the patient move or change to a different dental practice, copies should be forwarded. A costbased fee can be charged to cover the copying and postage and could be regulated according to limits set by the state.2

The dentist owns the patient's dental record as they have ordered the treatment and diagnosed the findings. Patients cannot have or keep their original record, but they have the right to review and request a copy of their record components at any time. Knowing this, professionals must only use factual statements when documenting treatment, correspondence, etc. A dentist cannot refuse to release any portion of a patient's record because of an outstanding financial account, especially if another dentist

is requesting the information or the patient is transferring to another practice for care. Any interruption in the patient's care should be avoided.

Radiographic images are a vital component of a patient's clinical record and only a licensed dentist can interpret them. When radiographic images are obtained, the patient is paying for the interpretation of the image(s) and not the actual film itself. Therefore, in most states, dentists typically maintain ownership of patient radiographs.

Original records are never to be released, including radiographs, to any party. No matter how formal a request for the originals may seem, only copies should be sent. The one exception to this rule is Subpoena *Duces Tecum*, which requires that the dentist or representative present original records to a court of law. In such an event, copies of the original records must be kept in the dental office and the process must be documented in full.²

A properly documented record is the best defense against malpractice litigation. Every member of the dental team is equally responsible for recording pertinent facts about a patient's visit on the chart. Every member of the dental team is also responsible for protecting and securing all vital patient information. While the ultimate responsibility resides with the owner dentist(s), all of the dental office professionals must be trained to understand the federal and state laws.

Malpractice cases can be addressed and won according to the inclusions to and the omissions from the dental record. Risk management involves processes to minimize the possibility of malpractice and includes specific steps regarding record keeping. Poor records often involve inconsistencies, are sloppy and illegible, and do not fully support treatment with incomplete entries. Through routine checks, the practice can ensure that records are complete and legible. These routine tasks can include the review of patient demographics and identification, their health history, and entries in progress notes. Other notations regarding information such as telephone conversations,

missed appointments, and failures to follow directions must be included under the concept of complete records.

The Health Insurance Portability and Accountability Act of 1996, more commonly known as HIPAA, has impacted the dental record to require more record safety and patient privacy. The law is meant to protect patient privacy while health information is being shared among providers and insurance companies. All employees must be trained in following all HIPAA standards. Any violations in these policies must be documented and reported according to the law and procedures set forth by the dental office. While the whole dental team has a role in compliance. the dentist is ultimately responsible for enforcement. All patients must receive a copy of the office's HIPAA practices and must sign a form verifying the receipt.2

There are two major focuses, portability and accountability, covered in four basic sets of HIPAA standards. The first HIPAA standard, titled Transaction and Code Sets, requires dental procedure terminology and their corresponding insurance code numbers to be standardized for all of dentistry and dental-related procedures. Dentistry currently follows the codes provided in the American Dental Association publication titled *Current* Dental Terminology, or CDT, which is usually updated biannually. This change was intended to streamline the process of creating a claim and also processing the claim by via insurance companies.¹ Offices not filing electronic claims do not need to comply with this one standard. However, any dental office intending to file with Medicaid must submit all claims in electronic format.3

The second standard, known as the Privacy Standard, deals with the right to privacy and the office's requirement to tell patients how they will do it. Each provider must name a Privacy Officer and must prepare a written policy. This policy must be offered to every patient and posted in the office. When received, the patient must sign a document that they have received the policy so the office can document compliance.

The third standard is the Security Rule. Security in this case refers to protecting the confidentiality and integrity of the record while always knowing the location of the record for retrieval. Each type of information should require a necessity to access it, often via a protected password or pass-phrase. Dental team members should only have access to those portions of records that are essential for providing quality dental treatment. Physical protection requires equipment free from compromise and environmental hazard, as well as additional back up of information should the electronic system go down. Protection also means that records must not be in view of other patients or office visitors, such as posted daily schedules viewed via monitor or paper.





Figures 2 & 3. HIPAA Notices Concerning Electronic Mail and Treatment Discussion.

The final standard requires each provider have a National Provider Identifier. This unique and permanent 10-digit number identifies the dentist or practice where treatment was provided. It is not meant to be used for other purposes such as tax identification or practitioner license number.³

With the development of the electronic health record (EHR), several governmental orders have been initiated. One of particular importance to dentistry is the Health Information Technology for Economic and Clinical Health Act, or the HITECH Act. The HITECH Act promotes the meaningful use of patient information and gives even more power for HIPAA enforcement.⁴

Portability is important for reasons of access and job transfer. HIPAA ensures portability for employees when they change employment and possibly receive a change in coverage. Also, a record that is electronic has the additional ease of portability. Being able to forward digital images and documents adds efficiency when a patient requires referral or moves away from an area.

The National Health Information Infrastructure (NHII) is a concept of total health communication. Along with the patient's medical information, the dental records could also be available to all health practitioners in an effort to provide quality healthcare. The ultimate goal of each record is that it will be controlled by the patient, but each provider must maintain their own portions. The record requires continued safety protocols to maintain confidentiality. Dentistry has not been forced to comply as of this time but having electronic records will make this transition easier for the practice should that time come.¹

Making Entries in the Patient Records

Whether the entry into the dental record is handwritten or electronic, it must be complete and consistent with all other patient record entries. Additionally, each time the record is accessed during treatment, the aseptic chain must be maintained to prevent cross contamination. Personal protective equipment (PPE) is not required in the business areas of

the practice so protective barriers must be utilized on equipment such as keyboards and portable room tablets.

If handwritten, the information must be complete, legible, and entered in non-erasable ink. As this is a legal document, treatment procedures and the names of dental materials must be spelled correctly. If the entry is electronic, the software has a program that tracks all entries by identifying the person who accessed the record. The entry is saved after a period of time and, if an alteration is made, the responsible person and entry is also tracked. This is another reason why a pass code or phrase must never be shared. While handwriting is not an issue with electronic records, correct spelling is still necessary.

In both cases, entries must be accurate and factual. Even as the patient is describing the reason for their visit, descriptions, or symptoms, the statements must be documented as said without inference. Statements must be truthful and objective (as opposed to subjective and inferring opinion) except for those related by the treating dentist regarding possible diagnosis, treatment plan, and prognosis. Signs are what is seen (ex. abscess, swelling, widened periodontal ligament space in a radiograph) and collected while observing the patient. Facts include date of treatment, updated medical issues, and the tooth/teeth with their involved surfaces under treatment.1

To be consistent, an office can choose to standardize charting notes according to the procedures performed and dental insurance coding. One way to standardize treatment notes is to following **SOAP: Subjective – Objective – Assessment – Plan.**¹²

In this manner, the **subjective statements** come from the patient. It can include their current symptoms and even encompass their current medical history. The team can use statements involving the patient's description of their symptoms.

Objective statements will encompass the information gathered by team involving vital

sign readings, oral and soft tissue exams, and the ordered radiographic images.

Assessment entries are the diagnoses made by the dentist as a result of the physical examination, subjective statements and objectives. It may include identified caries, abscesses, bone loss, or periodontal disease.

In the final **plan** notes, this can document the treatment administered at that visit, plus medications prescribed and any necessary referrals. These notes should address each procedure that requires a charge to the patient.

To standardize this process, these notes can be organized through a template. A template can save time as well as verifying that all notes are entered for risk management procedures. Using the SOAP method has also been helpful when completing dental insurance forms and the ability to refer to details is requested by the insurance company.

Treatment is often abbreviated and must be standardized to eliminate any error. Offices often maintain a copy of abbreviations and symbols in case any are questioned. It is especially important to remember standard abbreviations versus those used in common texting. Incorrect acronyms can accidentally be entered out of habit and compromise the integrity of record keeping.⁵

Most offices often commit to using the Universal numbering system involving permanent tooth numbers 1-32 (Figure 4) and primary tooth letters A-T (Figure 5). This numbering system always begins at the patient's upper right side and moves across to the upper left side, down to the lower left side and finishes at the patient's lower right quadrant.

However, orthodontic practices often use Palmer Notation System (Figures 6 & 7) . This system, also known as the Symbolic numbering system, involves each of the four quadrants and the numbering or letters begin at the midline. Each quadrant involves permanent tooth numbers 1 through 8 and must include a bracket to denote the quadrant. As with the

Universal system, the primary teeth are noted with letters and utilize only A through E.

It is important to note which system is being utilized so that all patient documentation and possible referrals are consistent and/or converted for ongoing treatment.

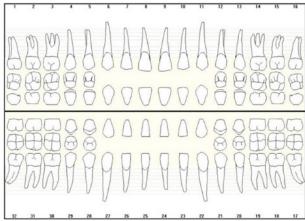


Figure 4. Universal Numbering System – Adult.

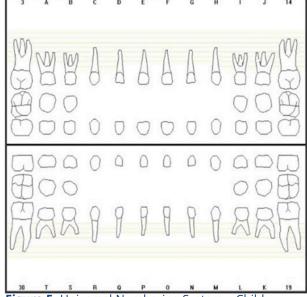


Figure 5. Universal Numbering System – Child.

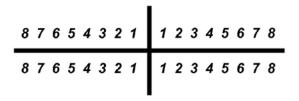


Figure 6. Symbolic (Palmer) Numbering System - Adult



Figure 7. Symbolic (Palmer) Numbering System - Child

Tooth surfaces are abbreviated as follows:

M - mesial

D – distal

O - occlusal

I – incisal

L – lingual

B – buccal (for posterior teeth)

F – facial (for anterior teeth)

Examples of common treatment abbreviations as follows:

BA – broken appointment

BOP - bleeding on probing

BW, BWX - bitewing radiographs

CRN - crown

Ex – exam

EXT – extraction

Flu – fluoride

NKDA - no known drug allergies

NSF – no significant findings

PA, PAX – periapical radiograph

P.O. – post operative

Pro, Prophy – prophylaxis

Tx – treatment

WNL - within normal limits

Anytime that anesthetic is administered during treatment, the name, epinephrine ratio, and number of cartridges must be noted. Administration of sedation procedures, such as nitrous oxide and oxygen or pharmacological medicine to induce sedation, must also be documented. An additional notation on how the patient tolerated the anesthetic and procedure overall is good follow up. If a certain anesthetic is chosen specifically due to a medical condition, that is also noted. An instance for this an include choosing a plain anesthetic over one that includes epinephrine due to recent heart attack, or uncontrolled diabetes or hyperthyroidism. More dental offices are performing soft tissue exams and vital sign readings at appointments. These

should be included and documented offering a baseline history of findings. As a periodontal condition is often the reason for litigation, the office must work to protect itself and discuss these matters with the patient and record any treatment plans and patient referrals.³

Any dental materials used during the procedure must be noted by name. Examples may include type of amalgam, composite, primer, bond, number and type of radiographic images, and alginate. In a specialty procedure such as an extraction requiring sutures, the kind and number of sutures placed must be noted along with any removal complications such as root/crown-dissection.

Home care instructions and information on follow-up appointments must be recorded. Recall/recare appointments regarding recommended time frames to return must also be noted. Should the patient not reappointment or follow home care instructions, this also must be documented to show possible patterns of noncompliance and contributory negligence.

Additional notes into the patient record may include telephone conversations on a correspondence log, referrals to specialty dental offices, and medications prescribed before or after treatment. Knowing this information, entries must be comprehensive. The idea of fitting the procedure into a certain amount of spaces or lines could directly relate to inaccuracy and incomplete notes. It is better to be complete as notes omitted are assumed in a court of law to have never existed.¹ As the saying goes, if it isn't written down, it didn't happen.

Once an entry is made, the office must commit to a standard number of spaces between entries. If one or two lines of separation are always used, this will be expected throughout the records. If this space is not there among entries, it could be seen as an alteration to the record and may be scrutinized for validity. Certain steps are to be followed if an entry is found to be incorrect and require an addendum. First, it is important not to obliterate the entry. Place one line through

Table 1. Example of Patient Chart Entries

03/15/20XX	7-MIF, Clearfil Shade A2. Ultra etch w/ Prime & Bond NT - prognosis good. N2O/O2 sedation, titration 3 of 8L (37.5%). Lidocaine 2% w/ epi-1:100K, 1 cartridge. No dental dam, Sectional matrix, no tx issues and dismissed after 5 min O2. POI regarding hardness, numbness, and flossing. Med history reviewed. Vitals = Resp 16, BP 132/88, Pulse 78, Temp 97.8. Questioned BP - has appt for re-ck. O2 rate did not dip below 95%	Jones DDS, Baker, CDA
04/21/20XX	19-MODL, Clearfil Shade A2. 1 Link Plus retention pin. Ultra etch w/ IntegraBond - prognosis questionable, large, if fractures will req. crown. N2O/O2 sedation, titration 2 of 7L (28.5%). Lidocaine 2% w/ epi-1:100K, 1 cartridge. Dental dam isolation, Sectional matrix, no tx issues and dismissed after 5 min O2. POI regarding prognosis, hardness, and numbness. Med history reviewed and HBP med dose changed to Losartan 50mg. Vitals = Resp 14, BP 120/78, Pulse 84, Temp 97.6. O2 rate did not dip below 95%	Miller DMD, Diller, CDA
04/23/20XX	Addendum to 4/21/20XX - 19-MOD Durafil Shade B1	Miller DMD, Diller, CDA
08/27/20XX	ex, bwx, pro, full soft tissue exam, perio charting - no significant findings, staining noted due to tobacco use. Discussed tobacco cessation, does not chew gum and rec nicotine lozenges as a start. POI regarding brushing technique and daily flossing. Rec return in 6 mos. Med history reviewed. Vitals = Resp 12, BP 122/84, Pulse 78, Temp 98.1	Jones DDS, Stuart RDH

the incorrect entry. At the next possible space, correct the entry, referring to the date. Do not ever use correction fluid on the incorrect entry. Doing so gives the impression to the reader that the office has something to hide.

If a record is under suspect with a court, expert document examiners may be subpoenaed to study the entries. These professionals can determine if an entry was altered (made at a later date, same author, same pen, and ink.) Experts look at factors such as the dryness of the ink (which identifies entries that were made at different times) and the penmanship of the writer which includes looking at pen pressure, speed, slant, and differences in writing surfaces.²

Clinical Components of the Dental Record

Each office must decide which office documents are necessities to running a dental business and providing quality dental care. Finkbeiner and Finkbeiner (2020) divide documents into categories of vital, important, useful, and nonessential.

Vital records are irreplaceable documents. These are clinical notes, financial records, and the legal documents regarding the business. *Important* documents are valuable to the practice tracking accounts payables and receivables, including payroll. These records are best retained for 5-7 years, but dictated according to the federal and state's regulations. *Useful* records are more difficult to define as different offices use certain documents differently and therefore place differently value accordingly. These documents may include employment applications and older banking information. These documents must be cleared before disposal. Nonessential records may include outdated notes and vendor pamphlets.6

Some offices strive to be paperless (completely electronic) while other practices are required by state law, such as in Minnesota.⁷ For those offices still generating paper documentation, a file folder must be created for filing and saving. The file folder will have the patient name and/ or number in view, as well as an aging label to show the last year of treatment.

A majority of offices are going with electronic formats or combination formats where some notes are paper and some are electronic.

Some offices with original paper documents will scan them into the patient's record and save them in an electronic format. This type of practice is referred to as a chartless practice. Several of the documents referred to in the course are often started in paper format by the patient. After the patient completes the form, a business assistant will transfer that information to an electronic format via data processing or by scanning and saving the document electronically.

As the clinical record is considered vital. documents that substantiate treatment and the *standard of care* are very important. Before treatment, patients must be informed of the practice privacy notices and acknowledgement must be received. The office may choose to complete a dental history to offer a baseline of treatment and gauge patient compliance. Patient treatment requires an updated medical history, clinical chart with treatment record and progress notes, periodontal screenings, and radiographic images. To complete monetary transactions, a patient registration form which includes financial responsibility and/ or insurance eligibility must be obtained. Additional forms that an office may choose to maintain include treatment consent forms, lab requests, referral forms, and the signatureon-file form. Should any of these forms be on paper, a file folder must be used to contain each patient's information.

Privacy Practice Notice

Each practice must have a document prepared that describes how their protected health information (PHI) will be used by the office for treatment, payment, and healthcare operations. This notice will also state how the patient's information will be secured and protected. The notice is followed up with a signature, asking the patient, parent, or guardian to acknowledge that they received the policy.

Registration Form

The registration form contains specific information regarding patient identification and demographics. A patient's social security

number will not be requested due to privacy issues unless the office can show proof that it must use this number versus an alternative specific identification generated by the practice. If the office does prove need, the practice must have the ability to block or encrypt this information from intruders or computer hackers. The form will often ask for the patient's full name, mailing address, work or student information, and electronic contacts. Phone numbers for home and work will be received as well as cell phone information and if they choose to receive electronic texts or alerts. This form will show if the patient or parent will be billed directly in full or if they have dental insurance. If insurance (primary and secondary) will be billed, information regarding the name, address, and group numbers will be found here. This form may also have a line that requires a signature to prove that the Privacy Notice was offered/received.

If the patient is covered by insurance, the office will often obtain a Signature on File form. When the patient, or parent/guardian signs for this, it authorizes billing to insurance without having the patient sign every time. If this signature is collected electronically, it can be attached to documents before forwarding. To caution, this signature is only to be used as the patient has designated for insurance purposes.

Medical History

An updated and thorough medical history is a vital document and necessary for providing the standard of care due to the patient. This continuously changing and updated document serves as a prompt for the team to discuss and verify answers provided by the patient or guardian. Additional notes should be recorded regarding new prescriptions and medical conditions that are explained by the patient in more detail.

As the goal for patient treatment revolves around providing total care, the office must have an updated medical history at every dental visit. This is often overlooked, and even more often if the patient was recently treated. An important fact to remember is that a health history can change with an event as minor as a prescription change. If this change is not

Patient Name:				Special Considerations:				
Age:	Date:							
	swers are for our records only and will b	e confidenti	al except					
	isclosure is required by law. AL QUESTIONS:		L	CURRENT BP		TEMP:		
		ır health in t	he nast vear?		Y N			
	Have there been any changes in your health in the past year Are you under the care of a physician?				Y N			
	Have you had any serious illnesses or operations?				Y N			
	Have you ever taken weight-loss me				Y N			
	Females: Are you pregnant?				Y N			
Evnlain	any 'yes' answers:							
.хріаііі	ally yes allowers.							
	Please check if you have (or have h AIDS / HIV Positive	ad) any of t	he following p	roblems:				
	Anemia		Heart murmu			Shingles		
	Arthritis		Heart, any pr			Shortness of breath		
	Artificial heart valve(s)	_				Sinus problems		
	Artificial joint(s)		Hemophilia			Skin rash		
	Asthma		Herpes			Stroke		
	Back problems		Hepatitis A			Surgical implants		
	Blood disease		High blood pr	ressure		Swelling, feet or ankles		
	Cancer Describe		Jaundice			Thyroid problems		
П	Chemo/radiation therapy		Jaw pain			Tuberculosis		
	Circulation problems		Kidney diseas			Ulcers/colitis/acid reflux		
	Cortisone treatments		Liver disease			Vision Impairment		
	Cough, persistent or bloody		Low blood pr			Other		
	Diabetes		Mitral valve		U	escribe		
	Emphysema		Nervous prob	oiems				
	Epilepsy		Pacemaker			NONE OF THESE		
	Fainting		Psychiatric ca			NONE OF THESE		
	Food allergies		Respiratory d Rheumatic fe					
	Headaches, frequent/severe		Seizure disor					
	Hearing loss		Seizure disori	uers				
	Allergies/Sensitivity:		-		tion, non-pre	scription, and/or vitamins) you		
	Anesthetic		are currently t	taking:				
	Aspirin	_						
	Penicillin							
	Codeine	_						
	Sulfa Iodine	_						
	Latex	9	Pre-medicatio	on required before	e dental tres	atment? Y N		
	Nickel			-				
	Other	Pres	cribing Physici	an				
	NONE OF THESE	Dosa	age/Time taker	n				
		10.	Travel within	last 30 days?		Y N		

Figure 8. Medical/Dental Questionnaire

1	, , ,			on/disease. ny previous dental treatment?	Υ	Ν		
2	Have you ever had an injury to your face, jaw, or teeth?					N		
3	. Do you ever feel like yo	Do you ever feel like you have a dry mouth?				N		
4	. Have you ever had an	ever had an unusual reaction to local anesthetic (numbin			Υ	N		
5	. Do you wear full or par	rtial dentures?			Υ	N		
6	. Have you had any teet	h replaced wit	h a dent	tal implant(s)?	Υ	N		
7. Have you had any teeth replaced with a f			h a fixed	fixed bridge(s)?		N		
8	Have you ever had any of the following treatment(s)?							
			Gum/	periodontal treatment	Υ	N		
			Ortho	odontics (braces)	Υ	N		
			Endo	dontics (root canal)	Υ	N		
			Extrac	ctions (teeth removed)	Υ	N		
			Bleach	hing/whitening	Υ	N		
9	. Do you have any piero	ings in the hea	ad and n	eck area?	Υ	Ν		
Check i	f you have any problems							
Check i	f you have any problems Bad breath Bleeding, sensitive gum: Canker sore or cold sore	with the follo s es right or	wing:	Food trapped between teeth Grinding or clenching teeth Loose teeth		 	Sensitivity to cold Sensitivity to hot	
Check i	f you have any problems Bad breath Bleeding, sensitive gum: Canker sore or cold sore Clicking or popping jaw: left 0. Do you smoke or use to What kind?	with the follo s es right or	wing:	Food trapped between teeth Grinding or clenching teeth Loose teeth Broken fillings Periodontal treatment	Y y?	 	Sensitivity to cold Sensitivity to hot Sensitivity to sweets Sensitivity to biting Staining	
Check i	f you have any problems Bad breath Bleeding, sensitive gum: Canker sore or cold sore Clicking or popping jaw: left 0. Do you smoke or use to What kind?	with the follo s es right or obacco in any	wing:	Food trapped between teeth Grinding or clenching teeth Loose teeth Broken fillings Periodontal treatment	Y y?	 	Sensitivity to cold Sensitivity to hot Sensitivity to sweets Sensitivity to biting Staining	
Check i	f you have any problems Bad breath Bleeding, sensitive gum: Canker sore or cold sore Clicking or popping jaw: left 0. Do you smoke or use to What kind? How long? swers to the questions list e in this dental office and ation change. I hereby au	with the follo ses right or obacco in any ed above are a may be share thorize this de	wing:	Food trapped between teeth Grinding or clenching teeth Loose teeth Broken fillings Periodontal treatment How frequentl Would you like	y e to quit will be to cessary. ervices.	N N sused to d	Sensitivity to cold Sensitivity to hot Sensitivity to sweets Sensitivity to biting Staining determine the dental treatment tify this dental office should any	
Check i	f you have any problems Bad breath Bleeding, sensitive gum: Canker sore or cold sore Clicking or popping jaw: left 0. Do you smoke or use to What kind? How long? swers to the questions list e in this dental office and ation change. I hereby au	with the follo ses eright or obacco in any ed above are a may be share thorize this de	wing:	Food trapped between teeth Grinding or clenching teeth Loose teeth Broken fillings Periodontal treatment How frequentl Would you like I understand this information ther medical offices only as necice to perform recommended s	y e to quit will be o cessary. ervices.	N seed to c	Sensitivity to cold Sensitivity to hot Sensitivity to sweets Sensitivity to biting Staining determine the dental treatment tify this dental office should any	
The ansi receivinforma	f you have any problems Bad breath Bleeding, sensitive gum: Canker sore or cold sore Clicking or popping jaw: left 0. Do you smoke or use to What kind? How long? swers to the questions list e in this dental office and ation change. I hereby au	with the follo s es right or obacco in any ed above are a may be share thorize this de	wing:	Food trapped between teeth Grinding or clenching teeth Loose teeth Broken fillings Periodontal treatment How frequentl Would you like to Lunderstand this information ther medical offices only as necice to perform recommended s	y e to quit n will be n cessary. ervices.	N N seed to consider the NEW	Sensitivity to cold Sensitivity to hot Sensitivity to sweets Sensitivity to biting Staining determine the dental treatment tify this dental office should any	
The ansidered received information of the control o	f you have any problems Bad breath Bleeding, sensitive gum: Canker sore or cold sore Clicking or popping jaw: left O. Do you smoke or use to What kind? How long? swers to the questions list e in this dental office and ation change. I hereby au are of Patient, or parent if	with the follo s es right or obacco in any ed above are a may be share thorize this de	wing:	Food trapped between teeth Grinding or clenching teeth Loose teeth Broken fillings Periodontal treatment How frequentl Would you like I understand this information ther medical offices only as necice to perform recommended s BER: (IF MORE THAN 2 YEARS, C	y e to quit n will be n cessary. ervices.	N N seed to consider the NEW	Sensitivity to cold Sensitivity to hot Sensitivity to sweets Sensitivity to biting Staining determine the dental treatment tify this dental office should any	

Figure 8. Medical/Dental Questionnaire (cont.)

asked for and noted, the patient may have an adverse reaction during treatment. The office should develop a policy regarding the length of time between reviews versus completing a new form.⁸

Additional focus has been given to prescriptions involving opioids for pain management. Informed consent involves alerting the patient to the benefits, side effects, possible dependency, and overall risk in taking these medications. An office may choose to have the patient sign an additional document verifying they have been apprised of their script options.¹

When the patient is seated for treatment, vital signs may be obtained and added to the history. Obtaining the patient's respiration rate has become more common since the Covid-19 pandemic. This rate must be obtained if the patient will receive a conscious sedation technique such as N₂O/O₂ sedation. Taking the patient's blood pressure and pulse rate with an automated unit along with their temperature are added to the patient record. This provides an opportunity to discuss the patient's overall health before dental treatment begins. The dentist is ultimately responsible for ensuring an updated history. According to an article published in the July, 2015 CDA Journal, "an unclear or out-of-date health history is the No. 2 record-keeping error in dental malpractice proceedings based upon a survey by the ADA of 14 professional liability carriers."8

The medical history is completed by the patient. If the patient is a minor, the form should be completed by the parent or legal guardian. In either case, the form can be on paper, or can be completed in electronic format. If on paper, the form(s) can be mailed prior to the appointment. By mailing or electronically mailing the forms, the patient can complete them in pen at home as they have time and have access to physician names, phone numbers, and easy access to medicine labels. When confirming appointments, it is best to repeat the need to bring these completed forms. Some offices will start the process with the patient on paper and then scan the document into the record to eliminate the need for storing paper documents.

Some offices are posting these physical forms to their office website, the patient can enter the information electronically to an encrypted site and then save it to a special folder so it can be sent securely to their own record. In this case, a review of the form in person is necessary to be sure all was properly understood and transferred correctly.

If forms are to be completed at the time of treatment, the patient should be asked to arrive early to allot enough time to complete them. Offering a clipboard and pen give them something to write on and offers privacy to the reverse side of the forms. In all cases, the patient must be assured that these forms are confidential and their privacy will be maintained.

With patient diversity increasing, it may be necessary to provide office forms in different languages. *The Dentist's Insurance Company of California (TDIC)* shows many examples of consent forms.

Clinical Treatment Records

Several forms and diagnostic records will be generated during a patient's treatment. The clinical chart tracks what happens with every patient encounter. The office may choose to complete an initial exam form that shows previous dental treatment. This may document current findings such as oral hygiene and a TMJ evaluation. Once completed, this form is kept and not altered.

Informed Consent forms are obtained before restorative treatment. These forms show that the patient understood the recommended options for treatment, had the opportunity to ask questions, and consented to their choice of treatment. In contrast, Informed Refusal forms must be obtained when the patient does not consent to receive recommended treatment. After a period of time and continued refusal, this form can be a basis to show contributory negligence and release the patient from the practice.

Progress notes will be entered at each patient encounter whether it be via office or teledentistry appointment, phone call or

professional consultation. This document details patient complaints, treatment provided, work completed, and the anesthetic and dental materials used. Additional information to record will be missed appointments, home care instructions, treatment prognoses, and prescriptions. Should the office choose to accept the patient's implied consent (consent relying on patient actions), this should be noted in the progress notes.

Furthermore, the team may complete a treatment plan to detail what procedures should be completed and/or state when the patient is to return for prophylaxis. This form may offer a priority list according to the findings in previous treatment. These can all be in paper or electronic formats. If electronic, the information is often entered directly into the chart at chairside to save time and maintain accuracy. Based upon a survey of professional liability carriers, undocumented treatment plans top the frequency of record keeping errors.⁴

Diagnostic images such as intra- and extra-oral radiographs and photographs will be kept in the file or stored electronically. The periodontal screening process will occur as prescribed by the dentist and saved to show areas of progress and progression. Diagnostic models are used in patient treatment but cannot fit into the actual record. These casts are often boxed and stored in a closet with the patient name or cross-referenced number.

Additional forms that dental offices often utilize are a combination of the following forms. Some of these can be combined together previously mentioned, where these forms may stand alone.

- Recall/Recare exam form updates care received and noted during prophylaxis visits.
- Medication history a form that logs all current medications plus those prescribed during treatment.
- Correspondence log form logs all calls from the patient, specialists, laboratories, insurance companies, etc.
- Financial arrangements works with the consent form to verify how the treatment fees will be paid.

With the incorporation of a true EDR, communication between the patient and the dental team should improve. If all of these forms were incorporated, the dental software program could generate charts, images, and instructions to aid the dental team in offering home care instructions.⁹

Business Components of the Patient Record

When addressing the issue of the patient record, the business portion focuses on accounts receivables. The financial and clinical records should remain separate. As a patient's financial record is accessed to apply a payment, there is no reason to have protected health information open at the same time.

Dental insurance forms can be created more efficiently by dental software. When the itemized procedures are documented in the patient chart, they can be accessed and printed, saving time for the dental team. These forms are generated with the ADA standardized dental codes and procedure descriptions. This can be forwarded to the dental insurance company for electronic payment or attached to the patient form and mailed for payment processing.

As the patient is billed for services, the family ledger is accessed. As payments are received from the patient or primary/secondary insurance company, they are applied to the balance until paid in full. Until that point, the patient will receive tracked billing statements. If there is any communication regarding payments, this can be added to the correspondence log form.

Another business record involves tracking the patient's recall/recare due dates. As the time approaches for their appointment, they will be notified of an appointment already set or notified that it is now time to call for an appointment. With the employment of electronic messaging, many dental software services include generated messages that saves time for the administrative assistant. The Telecommunication Consumer Protection Act (TCPA) protects consumers from excessive phone contact or harassment. The patient

must authorize use of their personal cell phone for text messages and electronic messages. Voice messages must follow HIPAA guidelines and should be 1 minute or less. Text messages should be less than 160 characters.³ This must be tracked to show that the office is fulfilling the dentist-patient relationship.

Additional business records that affect the patient are in regards to infection control. The OSHA Blood-Borne Pathogens Standard requires biologic monitoring of sterilizers and maintenance of those records.3 While these are not kept directly with patient records, they are supplements kept within the practice. Maintaining the records that prove successful monitoring, training, and waste disposal procedures are supplemental to verifying the dentist's duty to provide a standard of care. Offices that use off-site biological monitoring in sterilization monitoring will receive written documentation of successful or unsuccessful cycles that must be securely maintained. Those offices that choose to complete biological monitoring in-house will verify reports in a log book. As dental professionals continue mandated training and education in infection control protocols, these course verification certificates will be maintained a binder for easy access as needed or scanned and saved to a program within the dental software program.

Storage and Organization of Patient Records

When proper maintenance and organization of records can be demonstrated, it is an additional indication of quality patient care. As a legal document, the dental team must know where to find the patient record at any given time. Electronic records can be retrieved by the patient name or birthdate. The records must be consistently saved. Because there is so much data to secure and protect, many practices use third-party or offsite backup systems, whereas another option is to use cloud-based systems. In the instance when an office computer system goes down, possibly due to a power surge, outage, or computer crash, the office must have protocols in place to treat patients using paper forms until restored.1 Options for backing up can be internet based to a third-party, CD-ROM, or external, removable hard drive.1

If the paper record has been pulled from its storage space, a tracking mechanism must exist. This is often done in the form of outguide. An out-guide is a marker placed in the space that the pulled record had occupied. It may contain a note as to who pulled the record and where the record is being used within the practice until safely returned to the filing cabinet.

Offices utilizing paper files often use color coded tabs and aging labels along with space for a patient's full name for ease in locating and retrieval. Patient files are stored in alphabetical order. Color coded tabs can be used for the patient initials. This helps to focus in on the area of that name by offering a color pattern. The aging label is applied new each year. This label allows the team to view in active files much more easily. Files that have not received a current year label for the last year or two can be tracked and contacted for a recall/recare appointment.

Filing cabinetry for paper records will dictate the type of file folder purchased by the practice. Vertical file cabinets consist of drawers. Each drawer has a handle and is pulled out toward the person who opens the drawer. The file folders for this type of cabinet have tabs at the top for the patient name. The files are often organized alphabetically from front to back. The top tabs can be staggered from left to right to make the task of looking at several tabs much easier.

Lateral filing cabinets hold the files side by side, resembling a book shelf. Each shelf will have a cover for file protection. This design is desired as it is viewed as a space saver. Files are read from left to right as the tabs for patient names are located on the side of the folder.⁶

As stated, files are organized in alphabetical order. In some practices, they are also given an individual patient number in case there are records that must be cross referenced. Files must be sorted accordingly and re-filed properly to maintain the organization. Files not returned to cabinetry are subject to loss or damage. In both types of cabinetry, files should be tightly compressed, closed, and locked each



Figure 9. Lateral Filing System.

night. Compressed files in completely closed cabinetry are less likely to be destroyed in the case of fire or water damage.¹

Retention of Records

The regulations regarding the retention of records varies by federal and state rulings. While some notations and forms can be purged after a certain period, some records such as radiographic images should be kept indefinitely as they can be used in forensic identification. Storage of these physical records can take up a great deal of room. It must be remembered that the amount of storage space available cannot dictate retention. The office must follow state and federal law concerning the retention of records.¹

Each state has established rules regarding the length of time that legal actions can be pursued. After that time expires, known as the statute of limitations, the files can be purged. Before a practice begins this process, the National Archives and Records Service had produced a guide titled, "Guide to Record Retention Requirements" that should be thoroughly read.⁶

Records can be transferred within different areas of the practice according to the active status of the patient, active record storage space, and the ability to access the record as needed until the statute of limitation allows for purging.⁶ The dental staff must know where the

record is located at all times. True purging may not be accomplished due to laws, but records can be condensed and saved via microfilm, disks, or magnetic tape.¹

Records can be transferred to a different dental office or entity after the patient has made a formal, preferably written, request. The dentist must protect the information and maintain the patient privacy. The records transferred must be copies as the original records must remain with the practice.

Risk Analysis and Management

Risk management is a process of identifying issues that could lead to malpractice or issue of noncompliance with state and/or federal regulations. Early detection and change of certain practices can lead to better record keeping and higher patient confidence.

Records that are incomplete do not justify the actions of the dental team and do not back the need for dental treatment.¹ Treatment that is not listed in the record is assumed to have never happened at all and, therefore, assumed to have never been completed. Good patient rapport and communication can go a long way to establish the dentist-patient relationship, and this can further the confidence of the patient during any dental treatment.

Poor record keeping has been reported by legal professionals which led directly to the case

being found in favor of the complaining patient. Records that are not completely legible or disorganized are laying the groundwork for the office to lose in a court of law.¹

As stated, a lack of treatment planning and the lack of an updated medical history are found to be the top record keeping errors. As record keeping is often an area of issue, a dental office can perform randomized record audits to show the practice where they could adjust their current entry practices to reduce the chance for litigation. This can be done by randomly pulling physical dental charts or opening electronic records to verify consistency and legibility.

Practices that are using electronic systems to store and transmit patient information are required to complete security risk analysis under the Security Rule of HIPAA. Willfully ignoring this step has led to the uncovering of HIPAA violations that resulted in revocation of licenses, cancellation of contracts, severe fines and lawsuits. Tools exist if a dental office chooses to try this analysis on their own, but outside consulting or attendance of an educational seminar may be more thorough and offer documentation of the attempt of risk management. The analysis can identify possible charting omissions and/or threats to an inadequately encrypted system.

Summary

Whether EDR or paper records are chosen for use in the office, the information regarding the patient must always be as complete as the standard of care requires. Consistent, complete, and secure records are a sign of satisfactory patient treatment and the establishment of an acceptable dentistpatient relationship. As technology continues to advance, the patients of the practice will come to expect their dental team to be utilizing current techniques. That may include a basic computer system for records, scheduling, and security or go beyond that to integrated applications such as computer assisting crown work and three-dimensional radiography.

The dental team must maintain and protect all patient information. Knowing the regulations for retention and transfer is critical for following HIPAA regulations. Conducting intermittent risk analyses audits can help to identify and eliminate threats. It is important that the dentist foster an office culture that places importance on complete, accurate, and current records. Whether the records be in paper or electronic format, the standard of care and dentist-patient relationship will be viewed stronger by all parties.

Course Test Preview

To receive Continuing Education credit for this course, you must complete the online test. Please go to: www.dentalcare.com/en-us/professional-education/ce-courses/ce532/test

1.	A practice that continues to use paper forms that are scanned into the electronic record and then shredded is considered a practice. A. chartless B. paperless C. objective D. contract
2.	The owns the patient dental record. A. patient B. dentist/dental practice C. state D. patient's guardian if a minor
3.	"The patient described sensitivity to biting in the upper right quadrant." This is an example of a(n) statement. A. opinion B. secure C. subjective D. objective
4.	The of HIPAA defines the requirement of using standardized insurance codes. A. Security Rule B. National Provider Identifier Standard C. Transaction and Code Sets Standard D. Privacy Rule
5.	A/n is the best defense against malpractice litigation. A. properly documented record B. licensed dentist C. dental team that is current on infection control procedures D. attorney specialized in dentistry
6.	Standard texting and dental abbreviations are used often and interchangeably in dental records. Treatment is often abbreviated and must be standardized in the dental office to eliminate any error. A. Both statements are true. B. The first statement is true. The second statement is false. C. The first statement is false. The second statement is true. D. Both statements are false.
7.	Vital records are documents. A. important B. irreplaceable C. useful D. non-essential

To correct an entry, a line is drawn through the incorrect entry and an addendum is made later in the charting notes. Correction fluid should never be used to correct an entry on a paper record form. A. Both statements are true. B. The first statement is true. The second statement is false. C. The first statement is false. The second statement is true. D. Both statements are false.
filing cabinets hold the files side by side, resembling a book shelf. A. Vertical B. Card C. Open D. Lateral
A(n) is a marker placed in the space that the pulled record had previously occupied. A. purge label B. aging label C. out guide D. stop label
The protects consumers from excessive phone contact or harassment. A. Health Insurance Portability and Accountability Act B. Telecommunication Consumer Protection Act C. HI-TECH Act D. Electronic Health Record Act
Based upon a survey of professional liability carriers,

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Additional Resources

• No Additional Resources Available.

About the Author

Wilhemina Leeuw, MS, CDA



Ms. Leeuw is a Clinical Assistant Professor with Indiana University School of Dentistry, Division of Allied Dental Education, located in Fort Wayne, Indiana. She is a DANB Certified Dental Assistant since 1985. She worked in private practice over twelve years before beginning her teaching career. She received her Baccalaureate and Master's degrees in Organizational Leadership and Supervision from Purdue University. She has authored for the American Dental Assistant's Association and is currently serving as a CODA program site visitor and review committee member. She is very active in her local and Indiana state

dental assisting organizations. Her educational background includes dental assisting - both clinical and office management.

Email: wrleeuw@iu.edu