The Journal of the Michigan Dental Association

Volume 106 | Number 4 Article 3

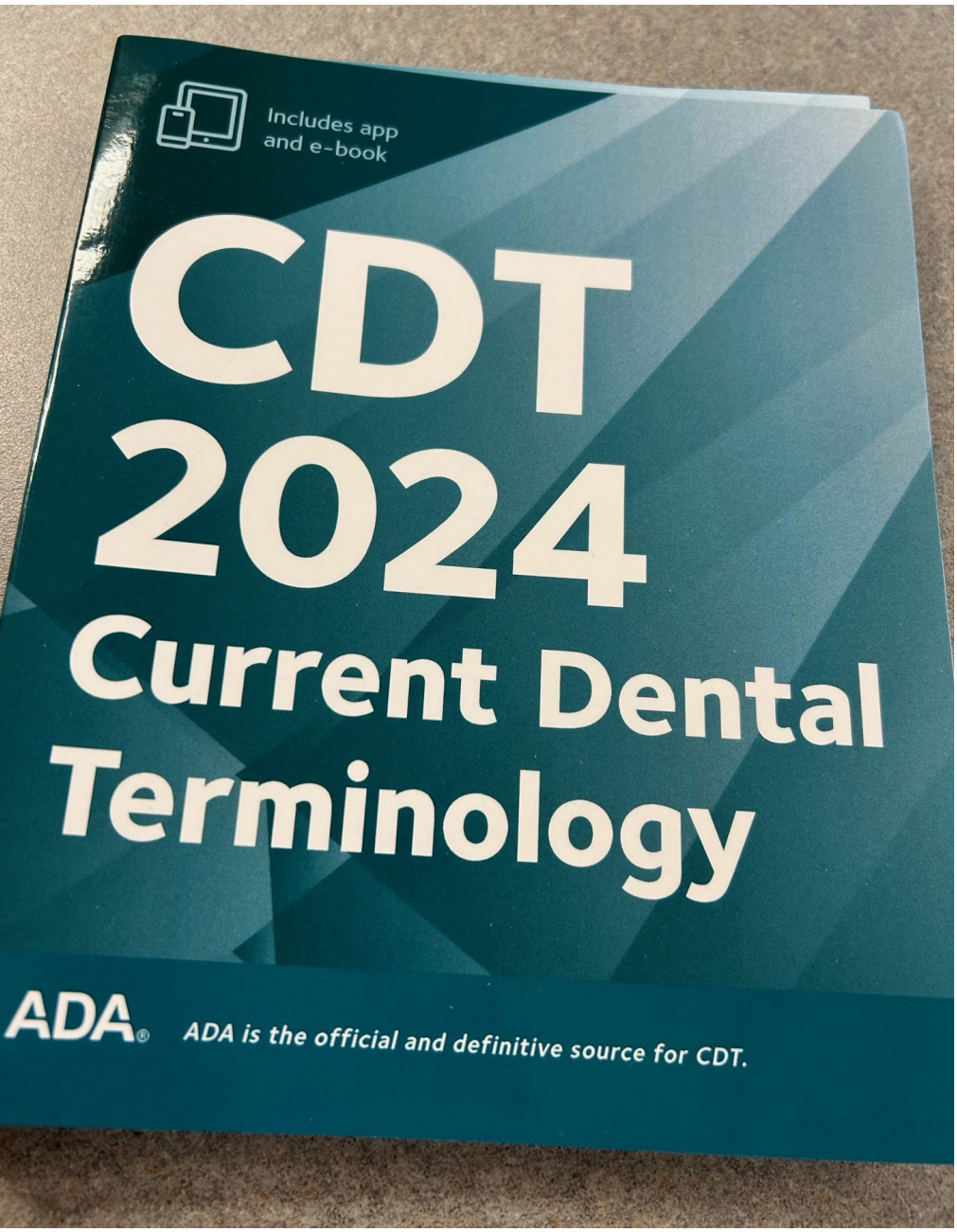
4-1-2024

Dentistry's CDT Code: Its Origins, Use and Future

Frank J. Pokorny II, MBA, FACD(Hon)
American Dental Association (retired), frank.pokorny@sbcglobal.net

Dentistry's *CDT Code*: Its Origins, Use, and Future

By Frank J. Pokorny II, MBA, FACD (Hon)



Current edition – The updated CDT Code is available from the ADA at store.ada.org.

Today's version of the *Code on Dental Procedures and Nomenclature* is the latest iteration of the code set first published in 1969.[1] Commonly called the *CDT Code* (or *CDT*), this ADA intellectual property has served dentists and the dental community at large since 1969 as the common and consistent language for documenting services delivered to patients.

This article will examine the origins, structure, and current usage of the *CDT Code*, proposing insights into how the *CDT* could actively evolve in the future.

Let's begin with *CDT*'s definition, which is "A listing of dental procedure codes and their descriptive terms published by the American Dental Association; used for recording dental services on the patient record and reporting dental services and procedures to dental benefit plans. The *CDT Code* is provided in a manual titled *Current Dental Terminology*."[2]

The *CDT Code* was printed in the *Journal of the American Dental Association* in its first two decades, ending in March 1989.[3] The seventh version in 1990 marked a pivotal shift when it was published in a dedicated manual named *CDT-1*, encompassing the entire *CDT Code*. This manual, including the *CDT* version effective Jan. 1, 1990, further featured educational content not found in the earlier versions published in *JADA*. The educational material, developed under the guidance of what is now the ADA Council on Dental Benefit Programs, aimed to facilitate the appropriate selection of codes for patient

record-keeping and claim reporting.

CDT-1's significant educational content addition was including a chapter on "Code Descriptions" for many, though not all, *CDT Code* entries. The target audience for this chapter, along with those containing glossaries of dental clinical and administrative terms, claim form completion instructions, tooth numbering schemas, etc., was and continues to be dentists and practice staff. These chapters are particularly valuable for practice staff without a dentist's clinical education and experience. Since its inception, the *CDT Code* has been recognized as ADA intellectual property, serving multiple needs such as documentation, billing, reimbursement, revenue, and data analytics for various sectors within the dental community. It functions as a toolkit where each code represents a tool with diverse applications.

The widespread use and long-term integration of the *CDT Code* into the dental community resulted in its formal recognition through HIPAA.[4] On Aug. 17, 2000, under the Administrative Simplification provisions of the law, the secretary of Health and Human Services published the final rule on HIPAA standard transactions and code sets in the *Federal Register*.[5] This rule designated the ADA's *Code on Dental Procedures and Nomenclature* as the national standard for documenting and reporting dental services, through changes to 45CFR Parts 160 and 162, which established standards for electronic health care transactions and code sets used in these transactions. According to the regulatory text:

■ 162.1002 Medical Data Code Sets — The Secretary adopts the following code set maintaining organization's code sets as the standard data code sets:

(d) *Code on Dental Procedures and Nomenclature*, as maintained and distributed by the American Dental Association, for dental services.

Abstract

Today's version of the *Code on Dental Procedures and Nomenclature* — commonly referred to as *CDT 2024* — is the latest iteration of the code set first published in 1969. The *CDT Code* is ADA intellectual property that serves dentists and the dental community at large as the HIPAA standard for documenting and reporting services delivered to patients. *CDT* supports multiple needs: e.g., documentation; billing and reimbursement; revenue; data analytics. The code set's maintenance is an open process overseen by the ADA Council on Dental Benefit Programs' Code Maintenance Committee. Any dentist or interested party may submit a maintenance request. This paper will comment on this code set's origins, structure, current usage, and maintenance process, as well as suggesting how *CDT* could continue to evolve.

Keywords: American Dental Association, Code on Dental Procedures and Nomenclature, CDT Code, Current Dental Terminology, diagnostic codes, procedure codes, code descriptions, dental claim, HIPAA, Council on Dental Benefit Programs.

The year 2000 held significant developments for the *CDT Code*. First, the release of the ninth version, *CDT-3 2000*, introduced a change to the five-character code format, substituting the letter "D" for the numeral zero ("0") as the first character of every code. This strategic move by the ADA allowed *CDT* to be designated as the HIPAA standard for documenting dental procedures, ensuring the ongoing relevance and value of this ADA intellectual property across the entire dental community.

Second, a legal dispute over the ownership of intellectual property of the *Code on Dental Procedures and Nomenclature* was resolved in favor of the ADA, a decision that not only upheld the intangible value of *CDT* as a HIPAA standard but also preserved the ADA's ability to generate non-dues revenue from the sale of *CDT* publications and royalties charged to entities like practice management software vendors and third-party payers licensing the code set for commercial use.

The third critical change in 2000 was implementing an open *CDT Code* maintenance process. This process allows any interested party to propose code additions or revisions, a process that aligns with HIPAA expectations. The ADA successfully defended this maintenance process during hearings convened by the National Committee on Vital and Health Statistics, the federal agency responsible for reviewing and recommending HIPAA standards.[6]

The maintenance processes of the *CDT Code* have undergone various iterations over the years, involving diverse parties within the dental community and varying frequencies of new versions, among other factors. However, the one consistent element has been the oversight provided by the ADA's Council on Dental Benefit Programs. In 2012, the CDBP instituted the current maintenance framework — the Council's Code Maintenance Committee. This decision-making body comprises voting representatives from the ADA and other oral health stakeholders, encompassing dental specialties, third-party payers, and dental educators. The committee is responsible for producing new versions annually, with the changes taking effect on Jan. 1.

All information about the process, including the CMC's operating protocol and maintenance request docu-

(Continued on Page 48)

CDT Code

(Continued from Page 47)

ments, is open to the public and published online at www.ada.org/cdt. This "CDT Code Portal" website contains details of the processes[7] (e.g., annual maintenance timeline; action request forms) as well as the CMC's operating protocol.[8]

Key facets of the process are:

■ The CMC meets in March every year to review and determine whether to accept or reject all action requests received by the closing date for submissions — Nov. 1 of the prior year.

■ CMC member organizations (and votes to be cast) are:

• The American Dental Association (5).

• Dental Specialties recognized by the ADA that have accepted the Council's invitation to participate (11).

• Other dental specialty organizations (2).

• Third-party payer and dental benefit plans (5).

■ Dentists and any other interested party may submit a request for a new code, revision to an existing code, or deletion of an existing code.

■ ADA staff, who serve as the CMC secretariat, review each request to ensure completeness and compliance with the form's completion instructions, and will inform the submitter of any technical errors or omissions that must be corrected before the request is placed on the CMC meeting agenda.

■ A majority yea vote of CMC-member organizations present at the meeting is required to accept a requested action. In other words, if all member organizations are present this means not less than 12 yea votes out of 23 must be cast.

■ All accepted requests will be included in the next *CDT* version; both the number assigned to new codes and their placement in *CDT* are solely determined by the ADA's Council on Dental Benefit Programs.

DENTAL PREPAYMENT

Council on Dental Care Programs

UNIFORM CODE ON DENTAL PROCEDURES AND NOMENCLATURE

The Council on Dental Care Programs in August submitted a supplemental report to the House of Delegates for informational purposes which contained the format of a *Uniform Code on Dental Procedures and Nomenclature*. The Council has emphasized to third party reimbursement agencies that procedures listed in the Code under specialty categories should not be interpreted as excluding general practitioners from performing such procedures since such procedures have been grouped under specialty categories mostly for convenience. The complete text of the Code is published below so that all dentists can familiarize themselves with the Council's efforts to simplify dental prepayment paperwork.

Dental prepayment programs were initiated cautiously in the 1950's to provide limited dental care benefits to select groups of persons on an experimental basis. Dental prepayment no longer is an exploratory mechanism for the financing and delivery of dental care and over 5 million Americans are now entitled to a full range of dental services under prepaid, insured, and other third party group purchase programs.

The American Dental Association took an early interest in dental prepayment programs and recommended policies for such programs through its Council on Dental Health until 1966 when the Council on Dental Care Programs was established as a separate agency of the Association to assist the dental profession and other interested organizations in developing programs for the planning, administration, and financing of dental care programs.

The Council on Dental Care Programs immediately recognized that for the orderly growth of dental prepayment, it was necessary to establish simplified reporting procedures to facilitate claims administration and third party reimbursement. Its first two priority projects were the development of a Uniform Report Form and a Uniform Code on Dental Procedures and Nomenclature.

The Uniform Report Form was introduced by the Council in July 1967 and shortly thereafter approved by the Health Insurance Council and the National Association of Dental Service Plans. That form is now utilized by major insurance companies which cover approximately 80% of the persons entitled to dental care benefits under commercial insurance programs. The basic form is also utilized by all of the member plans of the Delta Dental Plans Association (formerly, National Association of Dental Service Plans), the national coordinating body for the country's nonprofit dental service corporations.

The Council spent nearly two years on this *Uniform Code on Dental Procedures and Nomenclature* which is to provide a standard procedure-identification mechanism to complement the Uniform Report Form. The Council sought to recommend a Code which (1) would not affect the manner in which a dentist sets his usual and customary charges for professional services, (2) would allow the dentist to indicate to laymen individually identifiable dental services rendered for the patient, and (3) would be susceptible to easy comprehension and use by dental office personnel.

The Council is pleased that the Delta Dental Plans Association has approved utilization of the Code by its member Plans. The Council is certain that, after third party reimbursement agencies accept the Uniform Code, confusion over claims and disputes over coverage interpretations should be considerably lessened.

The *Uniform Code on Dental Procedures and Nomenclature* was not developed as a comprehensive listing of all of the dental procedures performed by dental practitioners. The Code rather is an attempt to identify and categorize the more usual dental service procedures covered under prepaid, insured, and other third party group purchase programs. It has been designed to facilitate claims administration, data tabulation, and the accumulation of useful service statistics for third party program operation through simplified grouping of similar dental procedures.

Coding System ■ The Code consists of a five-digit system of procedure identification. The first digit position, or number (extreme left), will be a zero in all instances and will be commonly recognized as identification of a dental service as contrasted to a hospital, medical, or surgical service. The second digit designates the dental service category, of which there are ten. The third digit designates the class of service within a given category and the fourth digit designates the subclass or specific procedure identification. The fifth digit has been added to allow for future expansion and procedure detail.

Unassigned class and subclass numbers are also available for future identification of additional service categories.

Covered Procedures ■ While this Code is intended primarily to include those dental services rendered in a dentist's office, it also includes many dental services which are usually performed in a hospital. Code numbers have been assigned to many of the dental services that are frequently performed only by dental specialists.

Diagnostic services common to most categories of dental services have been grouped under a separate diagnostic services category that includes all radiographs and laboratory tests and examinations. Similarly, to avoid duplication, other procedures which are performed by specialists and general practitioners alike or by members of two or more specialties, have been grouped under the specialty category with which the proce-

814

Initial publication — The first publication of the ADA *CDT Code* appeared in *JADA* in 1969. Subsequent revisions also appeared in *JADA* until the 1980s.

A common misconception

If you've thoroughly gone through the *CDT* manual, the following statement might not surprise you, but its implications on claim reimbursement might not be fully apparent.

"Required Statement: If there is more than one code in this edition that consists of a procedure and a dentist submits a claim under one of these codes, the payor may process the claim under any of these codes that is consistent with the payor's reimbursement policy."[9]

To illustrate the impact of this statement on how the codes available in *CDT 2024* can be used to report a procedure on a claim, let's examine the capture and interpretation of a bitewing radiograph. We'll start by referring to the

(Continued on Page 50)

CDT Code

(Continued from Page 48)

"bitewing" definition in the ADA's online Glossary of Dental Clinical Terms:

"Bitewing radiograph: Interproximal radiographic view of the coronal portion of the tooth/teeth. A form of dental radiograph that may be taken with the long axis of the image oriented either horizontally or vertically, that reveals approximately the coronal halves of the maxillary and mandibular teeth and portions of the interdental alveolar septa on the same image."[10]

Now to the available CDT codes.

■ The oldest and most familiar code is "D0270 bitewing — single radiographic image" that is within the *CDT Code*'s "Image Capture and Interpretation" subcategory.

■ There are also these relatively recent codes — "D0708 intraoral — bitewing radiographic image — image capture only" and "D0391 interpretation of diagnostic image by practitioner not associated with capture of the image, including report" — both within different *CDT Code* subcategories.

■ A third possibility is "D0251 extra-oral posterior dental radiographic image," which is also in the Image Capture with Interpretation subcategory, and has the following descriptor: "Image limited to exposure of complete posterior teeth in both dental arches. This is a unique image that is not derived from another image."

According to the ADA's general coding guidance ("code for what you do; do what you coded for") a dentist determines the appropriate code to report after reading the full entry (i.e., code nomenclature and descriptor, plus any subcategory descriptor) published in the current *CDT* manual. Depending on the circumstances, any of the codes cited above could be reported.

The ADA publishes online coding guidance on a variety of scenarios, two of which address diagnostic imaging. One is a video titled "Bitewings and Extraoral Imaging Procedure Codes,"[11] and the second a document titled *ADA Guide to 'Image Capture Only' Procedures and their Reporting*[12] that may be downloaded at no charge.

According to Section 5, "Veracity," of the *ADA Code of Ethics and Principles of Professional Conduct*, a dentist has a duty to communicate truthfully ("code for what you do"). A third-party payer ("dental benefit plan") is expected to provide payment for procedures reported on a claim, subject to available coverage as defined in the patient's benefit plan documents. These documents may include specific limitations or exclusions. Keeping in mind the three bitewing coding scenarios, the plan may not reimburse for the combination of D0708 and D0393, or D0251, if submitted, but may provide as an alternative a reimbursement for D0270. This is an example of the "Required Statement" in action.

The ADA publishes online coding guidance on a variety of scenarios, two of which address diagnostic imaging. One is a video titled "Bitewings and Extraoral Imaging Procedure Codes,"[11] and the second a document titled *ADA Guide to 'Image Capture Only' Procedures and Their Reporting* that may be downloaded at no charge.

Some dentists may be wondering how this can be. Doesn't HIPAA require that properly reported procedures be reimbursed? The short answer is "no," as HIPAA only requires a payer to accept a valid code on a claim. Adjudication is considered a payer's internal process that is outside HIPAA's scope.

Others may wonder why, in general, a procedure reported with a valid *CDT* code is not covered. This misperception is addressed in the *CDT Manual*'s Preface, which states:

"1. The presence of a *CDT* code does not mean that the procedure is:

a. endorsed by any entity or is considered a standard of care.

b. covered or reimbursed by a dental benefits plan."[13]

The *CDT Code* is the dental community's standard language that enables clear and consistent documentation of services delivered in the patient's health record, as well as reporting delivery of these services to the dental benefit plan. A dentist's clinical decision-making process determines which procedures are delivered to a patient. Separately, a dental benefit plan's claim adjudication process determines whether or not the procedure delivered is a covered service.

Building on a strong foundation

In 2021, discussions within the CDBP highlighted weaknesses in the current organization and content of the *CDT Code*. Additionally, potential avenues were identified to enhance its integration and value for documentation by dentists, third-party payers, dental educators, researchers, and other dental community members.

With the approval of the ADA Board of Trustees, CDBP initiated the Enhanced CDT Code Project.[14] The project's key concepts were that CDT content must be clear and unambiguous, not duplicate information that is captured with other standard code sets (e.g., tooth numbers, area of the

oral cavity; diagnosis), and incorporate dental procedure code modifiers for greater detail on the manner and components (e.g., armamentarium; materials) of a delivered procedure.

An enhanced *CDT Code* schema that embraced these key concepts was prepared by the CDBP, with the intent that it be published to solicit comment from dentists and all other interested parties in the dental community. The council believed that such feedback was a vital step before any further action on development and possible implementation could be considered.

Feedback from the five-month (November 2022 to March 2023) public comment period did not convey resounding support for the proposed code set architecture. Criticisms focused on the proposed architecture's complexity, unfamiliarity with other code sets cited (e.g., ICD-10-CM), and no estimates of implementation costs.

Concerns conveyed by members of the profession and others in the dental community led the council to pursue two alternative courses of action. One would be to continue to monitor the needs of the dental profession and the community for documentation and reporting of codified information. The other is to proceed with enhancing the *CDT Code* within the constraints of the current format for a *CDT* code — a five-character code that begins with the letter "D" and is followed by four additional characters, currently numbers.

CDT 2024 is the first iteration for enhancing the *CDT Code* within the long-established and recognized "Dxxxx" format. An essential step in achieving this was the council's decision to include comprehensive instructions in the *CDT Code* Action Request Form's preface[15] that incorporates two of the original enhanced *CDT Code* key concepts. A *CDT Code* entry (nomenclature and descriptor): a) must be unambiguous; and b) must not duplicate information that is captured with other standard code sets (e.g., tooth numbers, area of the oral cavity; diagnosis).

How many unique codes can be created within the "Dxxxx" format before there are no more numbers available? It's a fair question. Arithmetically, a four-digit sequence of the numerals "0" through "9" yields 10,000 unique combinations ("0000" through "9999"). But will that be enough over time, as more and more unique procedures are assigned code numbers? With some 800-plus CDT codes available today, 10,000 is a long way off, but even if the number of

(Continued on Page 52)

CDT Code

(Continued from Page 51)

unique CDT codes approaches 10,000 there is a solution offered by HIPAA.

In a HIPAA standard electronic transaction (i.e., the 837D dental claim) the field for a dental procedure code is five characters — any five characters, numbers, or letters or combinations thereof. At some time, a valid CDT code could be "D" followed by any combination of numbers or letters, or both. Such a four-character sequence ("0000" through "zzzz") would accommodate 1,679,616 possible unique codes.

The likelihood of reaching that limit is beyond the scope of this discussion. What we'll focus on is how the dental community will be affected by anticipated growth.

Two known constraints on how the *CDT Code* is organized and published have already begun to be addressed. Organizing and publishing *CDT* with Categories of Service (diagnostic, preventive, et al.) is one such constraint. The rationale for categories was that they would make it easier to find the appropriate code for a procedure — a reasonable thought in the days of libraries with card catalogs and hardcover books with indices; days when the concept of computer-supported keyword search and other technology in use today was only seen in episodes of "Star Trek" (the original series).

When originally published in *JADA* and for many versions after, there were 10 categories of service, limited by the use of the numerals "0" through "9" in the second position of a five-character *CDT* code, originally intended to identify the procedure's category of service.

That concept fell by the wayside first with parsing maxillofacial prosthetics ("D58xx") into a separate category from removable prosthodontics ("D5xxx"), followed by separating implant services ("D6xxx") from fixed prosthodontics ("D62xx").

In *CDT 2024* the 12 categories of service again expanded, with sleep apnea services becoming the 13th category, parsed from adjunctive general services. What differs here from the prior two parsings is that both sleep apnea and adjunctive codes have the same format — "D99xx" — which reinforces how code set content is used today in search engine technology, electronic transactions, and automated data processing. In today's world, every code is ultimately associated with a file that contains information pertaining to that code (e.g., nomenclature; descriptor). Such files, sometimes referred to as tables, are maintained by software developers including dental practice management system vendors, third-party payer claim adjudication systems, researchers, and quality measurement metrics.

Each entity stores and utilizes codified information in ways that satisfy its proprietary needs. A standard code set, such as the *CDT Code*, has a specific meaning as published in the *CDT* manual. This uniformity and consistency are the important reasons for why the ADA's *Code on Dental Procedures and Nomenclature* is the national standard for documenting and reporting dental procedures.

The concept that codes for related procedures should be in sequence is the second known constraint on how the *CDT Code* is organized and published. This is concept arises from the original definition of a code's structure:

"The *Code* is a five-digit system to identify dental procedures and services. The first digit is a zero throughput the *Code* and it identifies all procedures as being dental as contrasted to medical, hospital, or surgical services. The second digit designates the category of dental service. The third digit indicates the class of service within the dental category, and the fourth digit designates the subclass of the specific procedure. The

fifth digit allows for further expansion of the *Code* when necessary."[16]

One may infer from this definition that the original *CDT* code format was seen by its authors as adequate to allow unfettered, sequential expansion, and that there would only be a need to parse the code set into 10 categories of service. Any such inference is not supported by the *CDT*'s evolution over its lifetime. As seen in *CDT 2024* there are now 13 categories of service, and instances within several of these categories where code numbers assigned to similar or otherwise related procedures are out of sequence. A simple example is in the restorative category:

- D2330 resin-based composite — one surface, anterior
- D2331 resin-based composite — two surfaces, anterior
- D2332 resin-based composite — three surfaces, anterior
- D2335 resin-based composite — four or more surfaces (anterior)

The potential problem of out-of-sequence codes has been addressed in the *CDT* manual by inclusion of the "Alphabetic Index to the *CDT Code*" and the "Numeric Index to the *CDT Code*" to assist in finding the full code entry when selecting the correct code for documentation and reporting. There is also the more elegant solution seen available in the CDT App that includes a keyword and code number search engine.

Mention of the CDT App is made here to emphasize how a code set presentation format created for a print age is less useful and, in some minds, an obstacle to efficiency in day-to-day practice administrative activities. Dentistry is on the cusp of embracing a more robust dental procedure coding structure that builds upon the well-recognized "Dxxxx" structure being used in more creative ways.

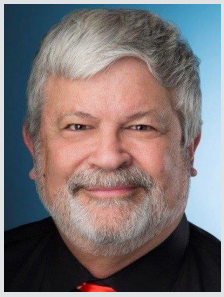
The discussed evolutionary changes emphasize the imperative for *CDT* to stay current and relevant. Recognizing the substantial advancements in data capture, transmission, and processing in the 21st century compared to 50 years ago, it is evident that this trend will persist.

An improved *CDT Code* is not a threat to the current status or relevance to dentists and the broader dental community. On the contrary, it represents a step towards aligning one administrative aspect of dentistry more closely with the demands of the 21st century. ●

References

1. Journal of the American Dental Association, October 1969.
2. American Dental Association. Glossary of dental clinical terms. At: https://www.ada.org/publications/cdt/glossary-of-dental-clinical-terms#cc.
3. (JADA 79[4]:814-817, 1969); (JADA 85[4]:789-792, 1972); (JADA 92[3]:647-652, 1976); (JADA 104[3]:351-356, 1982); (JADA 110[3]:389-393, 1985); (JADA 114[3]:373-377,1987); (JADA 118,369-377, 1989).
4. PL 104-191, the Health Insurance Portability and Accountability Act of 1996. Enacted Aug. 21, 1996.
5. Federal Register. Vol. 65, No. 160: 50370.
6. Testimony of the American Dental Association, CDT Code Maintenance Process. At: https://ncvhs.hhs.gov/wp-content/uploads/2014/05/120620p18.pdf.
7. Request to change a code. American Dental Association. At : https://www.ada.org/publications/cdt/request-to-change-to-the-code
8. Code Maintenance Committee. American Dental Association. At: https://www.ada.org/publications/cdt/code-maintenance-committee.
9. CDT 2024; page vi. American Dental Association, 2024.
10. American Dental Association. Glossary of dental clinical terms. At: https://www.ada.org/publications/cdt/glossary-of-dental-clinical-terms#bb.
11. Dental Benefit Video Series. American Dental Association At: https://www.ada.org/resources/practice/dental-insurance/dental-benefit-videos.
12. ADA Guide to "Image Capture Only" Procedures and Their Reporting. American Dental Association. At: https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/publications/cdt/v3_adaguidetoimagecaptureonlyproceduresandtheirreporting_2023jan.pdf?rev=04c5c3c8ab3941068a47c51102cf0d7e&hash=F1E1C6E0A0DED0D78891A2A89430C988.
13. CDT 2024; page v. American Dental Association, 2024.
14. Enhanced CDT. American Dental Association. At: https://www.ada.org/publications/cdt/enhanced-cdt.
15. Request a change to the code. American Dental Association. At: https://www.ada.org/publications/cdt/request-to-change-to-the-code.
16. JADA, 85(10), October 1972:789.

About the Author



Pokorny

Frank J. Pokorny II, MBA, FACD (Hon), began his business systems and operations career in 1972, gaining experience in both the commercial and health care sectors. He retired from the American Dental Association in 2023 after 23 years of service. As a member of the ADA Council on Dental Benefit Programs staff, Pokorny was directly involved with maintaining the *Code on Dental Procedures and Nomenclature*, serving as both the Code Maintenance Committee secretariat as well as creating and overseeing CDT-related publication and educational content. He also represented the ADA at meetings of the National Committee on Vital and Health Statistics on matters concerning the *CDT Code*, and at meetings of ANSI ASC X12, the body that created and maintains the HIPAA standard electronic transactions, including the dental claim. He received his BA from Columbia College, Columbia University (N.Y.), his MBA from Michigan State University, and in 2015 was awarded an Honorary Fellowship in the American College of Dentistry. He and his wife Nancy reside in Chicago.