

Southwestern Oklahoma State University SWOSU Digital Commons

Faculty Articles & Research

Health Information Management

1-4-2019

Current Procedural Terminology Chapter, Module

Veronica McGowan Southwestern Oklahoma State University

Abstract

Current Procedural Terminology (CPT *) is a medical code set used for describing and reporting medical, surgical, and diagnostic services and procedures. Copyrighted and published by the American Medical Association (https://www.ama-assn.org/practice-management/cpt)since 1966 and updated yearly by the Performance Measures Advisory Group (PMAG), these codes foster better data collection so that performance measurement is facilitated, and are often used for accreditation purposes to explain results and practices. Originally developed... **Read More**

Follow this and additional works at: https://dc.swosu.edu/him_articles Part of the <u>Health Information Technology Commons</u>

Recommended Citation

McGowan, Veronica, "Current Procedural Terminology Chapter, Module" (2019). *Faculty Articles & Research*. 3. https://dc.swosu.edu/him_articles/3

This Book Chapter is brought to you for free and open access by the Health Information Management at SWOSU Digital Commons. It has been accepted for inclusion in Faculty Articles & Research by an authorized administrator of SWOSU Digital Commons. An ADA compliant document is available upon request. For more information, please contact phillip.fitzsimmons@swosu.edu.

Current Procedural Terminology Chapter Original Author: Dr. Veronica F. McGowan

A note from the author of this resource about free resources: When using free resources, the responsible coder will triangulate a finding with other sources to verify accuracy. Insurance plans frequently produce free coding cheat sheets which may serve convenience purposes; the responsible coder seeks vetted resources with effective dates and stated policy impacts from official resources. One issue with educational materials associated with medical and clinical coding is that since code sets are updated often, free or low-cost reference guides are not readily available; even if available, the likelihood the resource has undergone rigorous review is low. Such limitations also apply to this free resource, in that the rating system made available at the OER Commons hosting site is only as good as the level of user participation that supports it. In addition, although this material is licensed with a reuse and remix license and is thus available for updating, the original author is not responsible for following up with subsequent or derivative versions to insure accuracy nor is in a position to demand that updated materials be stored at the OER Commons site. Because of the potential legal consequences of filing inaccurate claims, and the potential loss to research data pools and data quality improvement initiatives, responsible coders should consider professional resources as the gold standard in their practice.

Overview of Current Procedural Terminology

Current Procedural Terminology (CPT[®]) is a medical code set used for describing and reporting medical, surgical, and diagnostic services and procedures. Copyrighted and published by the American Medical Association (https://www.ama-assn.org/practice-management/cpt) since 1966 and updated yearly by the Performance Measures Advisory Group (PMAG), these codes foster better data collection so that performance measurement is facilitated, and are often used for accreditation purposes to explain results and practices. Originally developed as a method of communication between physicians and third-party payers and intended to be used for reimbursement, current applications include usage in: benchmarking activities (Garber, Ledonio, & Polly, 2015), risk prediction and trend analysis (Ehlers et al., 2017), planning activities (Shayver, et al., 2011), and use of quality indicators (Shiner, et al., 2012). Kahn, et al., (2016) argue that efforts to harmonize coding, including CPT codes between independent claims databases has impacted secondary usage of electronic health record data including better operational analytics, quality improvement, and research.

Stakeholders new to CPT should recognize that recommendations are continually made for the code set and that new standard and professional editions are issued in October after input is solicited by the CPT Advisory Committee (for more information on the committee, read their description: <u>https://www.ama-assn.org/about/cpt-editorial-panel/cpt-code-process</u>) and undergoes extensive review by the CPT Editorial Panel (for more information on the committee, read their description: <u>https://www.ama-assn.org/about/cpt-editorial-panel/cpt-code-process</u>) and undergoes extensive review by the CPT Editorial Panel (for more information on the committee, read their description: <u>https://www.ama-assn.org/about/cpt-editorial-panel</u>). To indicate the extent of change from the previous version, Leslie-Mazwi, et al. (2016) note that 140 new codes were added, 134 were revised, and 93 were deleted. Despite these changes, criticisms persist that the codes are not complex or granular enough to meet specific research needs (Kreitz, et al., 2017; Li, Shaul, & Sydorak, 2018; Young, et al., 2017). While CPT is similar to the International Statistical Classification of Diseases (ICD) coding system, that system is based on diagnosis while CPT reflects performed services.

Coding Categories

Three code levels: Category I, II, and III serve a continuum of purposes. Category I, a five-digit numeric code, is used for medical procedures and services that are widely performed and approved by the United States Food and Drug Administration (FDA) under a rigorous approval process that has validated the clinical value of the procedure or service. Examples of codes are: 27303 (abscess bone incision/excision of femur) and 36215 (cerebrovascular angiography, first-order). Two digit modifiers indicate additional services such as -59 (same day service performed) and -33 (preventive service). Category 1 codes have six sections:

- 1) evaluation and management (codes 99201-99499);
 - a. Physician visit codes
 - b. Consultation codes

- c. Emergency Department Services
- d. Critical Care
- e. Nursing Facility Care
- 2) anesthesiology (codes 00100-01999 and 99100-99150);
 - a. Anatomic format
 - b. Includes anesthesia administration:
 - c. General
 - d. Regional
 - e. Supplementing local
 - f. Other supportive services
 - g. Includes
 - h. Preop and postop visits
 - i. Care during the procedure
 - j. Administration of fluids and/or blood
 - k. Monitoring services
- 2) surgery (codes 10000-69990);
 - a. Body system
 - b. Body part
 - c. Type of procedure
 - d. Body part within procedure
- 4) radiology (codes 70000-79999);
 - a. Diagnostic radiology
 - b. Diagnostic ultrasound
 - c. Radiologic guidance
 - d. Breast mammography
 - e. Bone/joint studies
 - f. Radiation oncology
 - g. Nuclear medicine
- 5) pathology and laboratory (codes 80000-89398); and
 - a. Organ and disease panels
 - b. Drug testing
 - c. Therapeutic drug assays
 - d. Evocative/suppression testing
 - e. Consultations
 - f. Urinalysis
 - g. Molecular pathology
 - h. Multi analytic assays with algorithmic assays
 - i. Chemistry
 - j. Hematology and coagulation
 - k. Immunology

- l. Transfusion medicine
- m. Microbiology
- n. Anatomic pathology
- o. Cytopathology
- p. Cytogenetic studies
- q. Surgical pathology
- r. In vivo laboratory procedures
- s. Other procedures
- t. Reproductive medicine procedures
- 6) medicine (90281-99099, 99151-99199, and 99500-99607).
 - Serves as an umbrella category for procedures not reported elsewhere in the CPT structure

Regarding code look-up, an alphabetic index contains multiple code references with listings by:

- Procedure, service, or examination
- Organ or anatomic site
- Diagnosis or condition
- Synonym
- Eponym
- Abbreviation

In addition, a tabular list allows entries to be viewed numerically.

The optional five-character alphanumeric Category II code (<u>https://www.ama-assn.org/practice-management/cpt/category-ii-codes</u>), introduced in 2004, provides supplemental tracking codes typically used for quality performance reporting, with some uses for compliance purposes. Coded as 4 digits followed by a letter as the 5th character, Category II codes do not replace Category I codes. Guidance from insurer-provided publications recommend placement of CPT II codes in the procedure code field, in the same manner as CPT Category I codes with a zero billable charge since their purpose is quality improvement tracking and not reimbursement (BlueCross BlueShield of North Carolina, 2018). The current slate of Category II codes is located at <u>https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/cpt/cpt-cat2-codes_0.pdf</u>:

- Composite measures (0001F-0015F)
- Patient management (0500F-0584F)
- Patient history (1000F-1505F)
- Physical examination (2000F-2060F)
- Diagnostic/screening processes or results (3006F-3776F)
- Therapeutic, preventive or other interventions (4000F-4563F)
- Follow-up or other outcomes (5005F-5250F)
- Patient safety (6005F-6150F)
- Structural Measures (7010F-7025F)

• Non-Measure Claims Based Reporting (9001F-9007F)

Some benefits regarding the use of CPT II codes are: 1) clarification and simplification of chart review for many of the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set (HEDIS) performance measures (see more information at: https://www.ncqa.org/hedis/); and 2) monitoring internal performance for key measures throughout the year which would enable the healthcare provider to participate in pay for performance initiatives. Proactive healthcare providers can identify improvement goals and structure policies and interventions based on specific measures. Specifically, CPT II code usage may qualify a healthcare provider to participate in the Affordable Care Act's quality and value-based payment programs. Field literature and discussion has realized other benefits of utilizing the CPT II codes:

- Improved integration of electronic health records for reporting and effectiveness research (Reams, Powell, & Edwards, 2014);
- Decreasing the amount of unstructured form data to reduce amounts of missing data (Wells, et al., 2013) and increase participation in quality measurement initiatives (Tamang, et al., 2017);
- Coding services has directly impacted treatment pattern identification (Sikirica, et al., 2018) and follow-up tracking (Zheng, et al., 2017) to foster a more comprehensive and proactive use of big data in healthcare.

Category III codes are temporary coding structures used to describe emerging technologies that may eventually morph into an authentic Category I code. Category III codes identify services that may not have FDA approval and may not be eligible for reimbursement unless the medical procedure or service is involved in an approved research activity. Approved for 5 years, Category III codes are assigned a numeric identifier with a T postfix (such as 0552 T - low-level laser therapy, dynamic photonic and dynamic thermokinetic energies). The American Medical Association maintains the current production cycle list and other Category III information at: https://www.ama-assn.org/practice-management/cpt/category-iii-codes.

Terms for this chapter:

Category - The organization of the CPT code set into functional areas of billing, research, and experimental research.

Criteria – conditions which determine which category code should apply to a given service or procedure.

Modifier -a two-character code that is added to describe a variation to the procedure itself.

Questions that extend the learning for students:

1. Provide a synopsis of a recent civil liability or criminal prosecution that involved medical coding failure in claims reimbursement.

- 2. What is required to make your coding systems compliant with requirements from the CPT Editorial Panel?
- 3. What 5 criteria must exist in order for a Category I CPT code to be applied?

Conclusions

The future of the CPT code set is promising in that development appears to be ongoing with linkage to helping forward a more proactive and effective global health model, specifically:

- Shi, Pashova, and Heagerty (2017) are exploring how to create a "surveillance network" to benefit 100 million patients by standardizing CPT codes;
- Klann, et al. (2015) has developed an algorithm that approximates standardized codes for legacy records with potential impacts on longitudinal and historical medical research.

References

- BlueCross BlueShield of North Carolina. (2018, April 9). CPT Category II codes that support Blue Cross NC's 2018 provider quality measures. Retrieved from <u>https://www.bluecrossnc.com/provider-news/cpt-category-ii-codes-support-blue-cross-nc%E2%80%99s-2018-provider-quality-measures</u>
- Ehlers, A., Basu Roy, S., Khor, S., Mandagani, P., Maria, M., Alfonso-Cristancho, R., & Flum, D. (2017). Improved risk prediction following surgery using machine learning algorithms. *EGEMS (Generating Evidence & Methods to Improve Patient Outcomes)*,5(2). doi:10.13063/2327-9214.1278
- Garber, T., Ledonio, C. G., & Polly, D. W. (2015). How much work effort is involved in minimally invasive sacroiliac joint fusion?. *International Journal of Spine Surgery*, 9, 58. doi: <u>10.14444/2058</u>
- Kahn, M., Callahan, T., Barnard, J., Bauck, A., Brown, J., Davidson, B., . . . Schilling, L. (2016).
 A harmonized data quality assessment terminology and framework for the secondary use of electronic health record data. *EGEMS (Generating Evidence & Methods to Improve Patient Outcomes)*,4(1). doi:10.13063/2327-9214.1244
- Klann, J., Phillips, L., Turchin, A., Weiler, S., Mandl, K., & Murphy, S. (2015). A numerical similarity approach for using retired current procedural terminology (CPT) codes for electronic phenotyping in the scalable collaborative infrastructure for a learning health system (SCILHS). *BMC Medical Informatics and Decision Making*, 15(1), 1-12. doi:10.1186/s12911-015-0223-x
- Kreitz, T. M., Deirmengian, C. A., Penny, G. S., Maltenfort, M. G., & Deirmengian, G. K. (2017). A current Procedural Terminology code for "knee conversion" is needed to account for the additional surgical time required compared to total knee arthroplasty. *The Journal of Arthroplasty*, 32(1), 20-23. doi: 10.1016/j.arth.2016.06.040
- Leslie-Mazwi, T. M., Bello, J. A., Tu, R., Nicola, G. N., Donovan, W. D., Barr, R. M., & Hirsch, J. A. (2016). Current procedural terminology: history, structure, and relationship to valuation for the neuroradiologist. *American Journal of Neuroradiology*, 37(11), 1972-1976. doi: 10.3174/ajnr.A4863
- Li, Y., Shaul, D. B., & Sydorak, R. M. (2018). Differentiating abdominal procedures in pediatric surgery: The inadequacy of current procedural terminology codes. *Journal of pediatric surgery*, 53(9), 1811-1814. doi: <u>10.1016/j.jpedsurg.2017.11.049</u>
- Reams, C., Powell, M., & Edwards, R. (2014). State synergies and disease surveillance: Creating an electronic health data communication model for cancer reporting and comparative effectiveness research in Kentucky. *EGEMS (Generating Evidence & Methods to Improve Patient Outcomes)*,2(2). doi:10.13063/2327-9214.1064
- Shauver, M. J., Yin, H., Banerjee, M., & Chung, K. C. (2011). Current and future national costs to Medicare for the treatment of distal radius fracture in the elderly. *The Journal of Hand Surgery*, 36(8), 1282-1287. doi: 10.1016/j.jhsa.2011.05.017

- Shi, X., Pashova, H., & Heagerty, P. (2017). Comparing healthcare utilization patterns via global differences in the endorsement of current procedural terminology codes. *Journal for Applied Statistics*, 11(3), 1349-1374. doi:10.1214/17-AOAS1028
- Shiner, B., D'avolio, L. W., Nguyen, T. M., Zayed, M. H., Watts, B. V., & Fiore, L. (2012). Automated classification of psychotherapy note text: implications for quality assessment in PTSD care. *Journal of Evaluation in Clinical Practice*, 18(3), 698-701. doi: 10.1111/j.1365-2753.2011.01634.x
- Sikirica, M., Trantham, L., Joshi, A. V., Mohan, D., Neil, D., & Candrilli, S. D. (2018). Analysis of Pulmonary Rehabilitation (PR) treatment patterns and utilization in patients with Chronic Obstructive Pulmonary Disease (COPD) in the United States (US). In *B106*. *Pulmonary Rehabilitation: Outcomes and Extra-Pulmonary Manifestations* (pp. A4339-A4339). American Thoracic Society. Retrieved from <u>https://www.atsjournals.org/doi/abs/10.1164/ajrccmconference.2018.197.1_MeetingAbstracts.A4339</u>
- Tamang, S., Hernandez-Boussard, T., Ross, E., Patel, M., Gaskin, G., & Shah, N. (2017).
 Enhanced quality measurement event detection: An application to physician reporting. *EGEMS (Generating Evidence & Methods to Improve Patient Outcomes)*,5(1). doi:10.13063/2327-9214.1270
- Wells, B., Nowacki, A., Chagin, K., & Kattan, M. (2013). Strategies for handling missing data in electronic health record derived data. *EGEMS (Generating Evidence & Methods to Improve Patient Outcomes)*, 1(3). doi:10.13063/2327-9214.1035
- Young, R. A., Burge, S., Kumar, K. A., & Wilson, J. (2017). The full scope of family physicians' work is not reflected by Current Procedural Terminology codes. *The Journal* of the American Board of Family Medicine, 30(6), 724-732. doi: 10.3122/jabfm.2017.06.170155
- Zheng, R., Altieri, M., Yang, J., Chen, H., Pryor, A., Bates, A., . . . Telem, D. (2017). Long-term incidence of contralateral primary hernia repair following unilateral inguinal hernia repair in a cohort of 32,834 patients. *Surgical Endoscopy*, 31(2), 817-822. doi:<u>10.1007/s00464-016-5037-0</u>