ANSI/ADA Standard No. 1084 Approved by ANSI: May 2019



American National Standard/ American Dental Association **Standard No. 1084** 

# Reference Core Data Set for Communication Among Dental and Other Health Information Systems

ADA American
Dental
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**Standards Committee on Dental Informatics** 



ANSI/ADA Standard No. 1084 - 2019

# AMERICAN DENTAL ASSOCIATION STANDARD NO. 1084 FOR REFERENCE CORE DATA SET FOR COMMUNICATION AMONG DENTAL AND OTHER HEALTH INFORMATION SYSTEMS

The ADA Standards Committee on Dental Informatics (SCDI) has approved ANSI/ADA Standard No. 1084 for Reference Core Data Set for Communication among Dental and Other Health Information Systems. Working Groups of the ADA Standards Committee on Dental Informatics (SCDI) formulate this and other standards and technical reports for the application of information technology and other electronic technologies to dentistry's clinical and administrative operations. The ADA SCDI has representation from appropriate interests in the United States in the standardization of information technology and other electronic technologies used in dental practice. The standard was forwarded to the American National Standards Institute with a recommendation that the standard be approved as an American National Standard. Approval of ADA Standard No. 1084 as an American National Standard was granted by the American National Standards Institute on May 21, 2019.

The ADA SCDI thanks the members of the task group and the organizations with which they were affiliated at the time the specification was developed:

Amit Acharya (Chairman), Marshfield Clinic, Marshfield, WI; Terry G. O'Toole (Chairman), Past Director, Dental Informatics, Department of Veterans Affairs, Washington DC; Matt Ackerman, Carestream Dental, Atlanta, GA; Rickland G. Asai, Individual Representative, Portland, OR; Stephen Bergen, American College of Prosthodontists, West Orange, NJ; Dawn Christodoulou, XLDent, Loretto, MN; Kenneth Chung, Individual Representative, Milwaukie, OR; Zachary Church, Henry Schein Practice Solutions, American Fork, UT; Gyle Gale, Henry Schein Practice Solutions, American Fork, UT; Stephen Glenn, Individual Representative, Tulsa, OK; Douglas Gordon, Individual Representative, Pinole, CA; Michael S. Honeycutt, Document Storage Systems, North Palm Beach, FL; Richard A. Huot, Beachside Dental Consultants, Vero Beach, FL; Molly Jenkins, Defense Health Agency, Falls Church, VA; Ray S. Jeter, Augusta University-Dental College of Georgia, Augusta, GA; Mark W. Jurkovich, Health Partners, Minneapolis, MN; Jonathan Knapp, Individual Representative, Bethel, CT; Rudolph Liddell, Individual Representative, Brandon, FL; John A. Martin, Previser Corporation, State College, PA; Jean Narcisi, American Dental Association, Chicago, IL; Kishore Shetty, University of Chicago, Escondido, CA; Corey Stein, Western University of Health Sciences, Pomona, CA; Lynne VanArsdale, OrthoFi, Inc. Denver, CO; and Gregory G, Zeller, Individual Representative, Timonium, MD.

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### **FOREWORD**

(This Foreword does not form a part of the American Dental Association Standard No. 1084 for Reference Core Data Set for Communication among Dental and other Health Information Systems.)

In 1992, there was interest in the standardization of clinical information systems related to electronic technology in the dental environment. After evaluating current informatics activities, a Task Group of the ANSI Accredited Standards Committee MD156 (ASC MD156) was created by the ADA to initiate the development of standards, guidelines, and standards on electronic technologies used in dental practice. In 1999, the ADA established the ADA Standards Committee on Dental Informatics (SCDI). The ADA SCDI is currently the group that reviews and approves proposed American National Standards (ANSI approved) and standards developed by the standards committee's working groups. The ADA became an ANSI accredited standards organization in 2000.

The scope of the ADA SCDI is:

"To promote patient care and oral health through the application of information technology to dentistry's clinical and administrative operations; to develop standards, specifications, standards, and guidelines for: components of a computerized dental clinical workstation; electronic technologies used in dental practice; and interoperability standards for different software and hardware products which provide a seamless information exchange throughout all facets of healthcare."

This standard was prepared at the request of the late Dr. Mark Diehl, chairman, ADA SCDI Subcommittee on Clinical Informatics, by SCDI Working Group 11.9 on Core Reference Data. The SCDI Working Group 11.9 original chairman was Dr. Amit Acharya and Dr. Terry O'Toole as vice chair. Dr. O'Toole assumed the role of chairman in February 2017 with Dr. Ray Jeter as vice chair.

# AMERICAN DENTAL ASSOCIATION STANDARD NO. 1084 FOR REFERENCE CORE DATA SET FOR COMMUNICATION AMONG DENTAL AND OTHER HEALTH INFORMATION SYSTEMS

### 1.0 Rationale

The Reference Core Data Set (RCDS) provides for the structured electronic data elements to support key information exchange among and between dental and other health care settings. This includes the electronic sharing of essential patients' demographic and dental encounter/clinical data in a structured, computable format between dental or other health care venues.

# 2.0 Scope

The standard provides a technical specification to extract, format and transmit essential patients' demographic and dental and medical encounter and clinical data between one dental information system to another dental or medical health information system to support key syntactic and semantic information exchange.

The standard provides a list of pertinent data fields from the dental record about the patients (RDCS) that the health information system vendors can reference to internally map and extract information from their proprietary dental information system's data schema. Using the Health Level 7 (HL7) Consolidated-Clinical Document Architecture (C-CDA) standard the vendor can then generate a machine-interpretable (Extensible Markup Language (XML) describing content) as well as human-readable (Hyper Text Markup Language (HTML) describing the presentation) Oral Health Continuity of Care Document (OH-CCD) to achieve electronic information exchange between clinical information systems. The transmission of the OH-CCD between clinical information systems can be achieved using existing healthcare transport standards including FHIR, Direct, IHE and HL7 (<a href="https://www.himss.org/library/interoperability-standards/transport-standards">https://www.himss.org/library/interoperability-standards/transport-standards</a> & IHE Secure Exchange of Dental Information: <a href="https://www.ihe.net/uploadedfiles/documents/dental/ihe\_dent\_suppl\_sedi.pdf">https://www.ihe.net/uploadedfiles/documents/dental/ihe\_dent\_suppl\_sedi.pdf</a>)

## 3.0 Normative References

The following standards contain provisions, which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. Since all standards are subject to revision, parties to agreements based on this specification are encouraged to investigate the possibility of applying the most recent edition of the specification or standard listed.

- HL7 C-CDA (HL7 Implementation Guide for CDA® Release 2: IHE Health Story Consolidation, Release 1.1 - US Realm):
   <a href="http://www.hl7.org/implement/standards/product\_brief.cfm?product\_id=258">http://www.hl7.org/implement/standards/product\_brief.cfm?product\_id=258</a>
- HL7-Messaging standards HL7 V2.x: <a href="http://www.hl7.org/implement/standards/product\_brief.cfm?product\_id=146">http://www.hl7.org/implement/standards/product\_brief.cfm?product\_id=146</a>
- Center for Disease Control and Prevention (CDC), NUCC Provider Codes- Code System Details <a href="https://phinvads.cdc.gov/vads/ViewCodeSystem.action?id=2.16.840.1.113883.6.101">https://phinvads.cdc.gov/vads/ViewCodeSystem.action?id=2.16.840.1.113883.6.101</a>
- SNOMED International, SNOMED CT, <a href="http://www.snomed.org/">http://www.snomed.org/</a>