

- Electronic copy is controlled under document control procedure. Hard copy is uncontrolled & under responsibility of beholder. النسخة الإلكترونية هي النسخة المضبوطة وفق إجراء ضبط الوثائق. النسخ الورقية غير مضبوطة وتقع على مسؤولية حاملها.
- It is allowed ONLY to access and keep this document with who issued, who is responsible and to whom it is applicable. يسمح بالوصول وبالاحتفاظ بهذه الوثيقة مع مصدرها أو مع المسؤول عن تطبيقها أو مع المطبق عليهم.
- Information security code: ☒ Open ☐ Shared -Confidential تصنيف امن المعلومات: ☒ بيانات مفتوحة ☐ مشارك -خاص
- ☐ Shared-Sensitive ☐ Shared-Secret ☐ مشارك -حساس ☐ مشارك -سري

# Standards for Clinical Data Coding and Terminology

## Version (2)

Issue date: 03/08/2023

Effective date: 03/11/2023

Health Informatics and Smart health Department  
Dubai Health Authority

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	1/17

## INTRODUCTION

Health Regulation Sector (HRS) forms an integral part of Dubai Health Authority (DHA) and is mandated by DHA Law No. (14) of the year (2021) amending some clauses of law No. (6) of 2018 pertaining to the Dubai Health Authority (DHA), to undertake several functions including but not limited to:

- Developing regulation, policy, standards, guidelines to improve quality and patient safety and promote the growth and development of the health sector.
- Licensure and inspection of health facilities as well as healthcare professionals and ensuring compliance to best practice.
- Managing patient complaints and assuring patient and physician rights are upheld.
- Governing the use of narcotics, controlled and semi-controlled medications.
- Assuring management of health informatics, e-health and promoting innovation.

The Standards for Clinical Data Coding and Terminology aims to fulfil the following overarching DHA Strategic Priorities (2022-2026):

- Pioneering Human-centered health system to promote trust, safety, quality and care for patients and their families.
- Leading global efforts to combat epidemics and infectious diseases and prepare for disasters.
- Pioneering prevention efforts against non-communicable diseases.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	2/17

- Become a global digital health hub.
- Foster healthcare education, research and innovation.

## ACKNOWLEDGMENT

The Health Informatics and Smart Health Department (HISHD) developed this Standard in collaboration with Subject Matter Experts and would like to acknowledge and thank these health professionals for their dedication toward improving quality and safety of healthcare services in the Emirate of Dubai.

## Health Regulation Sector

### Dubai Health Authority

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	3/17

## TABLE OF CONTENTS

ACKNOWLEDGMENT.....	3
EXECUTIVE SUMMARY .....	5
DEFINITIONS.....	7
ABBREVIATIONS.....	10
1. BACKGROUND .....	12
2. SCOPE.....	12
3. PURPOSE.....	12
4. APPLICABILITY .....	13
5. STANDARD ONE: STANDARDIZING THE CLINICAL DATA CODING AND TERMINOLOGY .....	13
REFERENCES.....	16

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	4/17

## EXECUTIVE SUMMARY

The purpose of this document is to assure the use of proper and standardized medical codes and terminology in the Electronic Medical record (EMR) within the Health care facilities in the Emirate of Dubai. The standards have been developed to align with the evolving health information quality needs and international best practice. This standard includes the coding requirements for integrating with Nabidh HIE.

This document should be read in conjunction with the other health information governance

Documents released by DHA:

- [Policy for Health Information Assets Management](#)
- [Health Data Quality Policy](#)
- [Health Data Classification Policy](#)
- [Policy for Health Data Protection and Confidentiality](#)
- [Subject of Care Rights](#)
- [Consent and Access Control](#)
- [Incident Management and Breach Notification policy](#)
- [Data Management and Quality Policy \(Primary and Secondary Use\)](#)
- [Health Information Audit Policy](#)

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	5/17

- 
- [Identity Management Policy](#)
  - [Authentication and Authorization policy](#)
  - [Information Security standard](#)
  - [Interoperability and Data Exchange Standards](#)
  - [Technical and Operational Standards](#)
  - [Artificial Intelligence Policy](#)

---

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	6/17

## DEFINITIONS

**CDT:** Current Dental Terminology (CDT) is a code set with descriptive terms developed and updated by the American Dental Association (ADA) for reporting dental services and procedures to dental benefits plans.

**CPT-4:** Current Procedural Terminology code set describes medical, surgical, and diagnostic (radiology imaging and lab) services and is designed to communicate uniform information about medical services and procedures among physicians, coders, patients, accreditation organizations, and payers for administrative, financial, and analytical purposes.

**Health Information Exchange (HIE):** is the electronic transmission of health data and information among health care facilities according to national standards. Electronic health information exchange (HIE) allows doctors, nurses, pharmacists, other health care providers and patients to appropriately access and securely share a patient's vital medical information electronically—improving the speed, quality, safety and cost of patient care.

**ICD-10-CM:** International Classification of Diseases, Tenth Revision, Clinical Modification is a system used by physicians and other healthcare providers to classify and code all diagnoses, symptoms and procedures recorded in conjunction with hospital care. It provides a level of detail

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	7/17

that is necessary for diagnostic specificity and morbidity classification by Healthcare Provider Systems.

**International Refined-DRG (IR-DRG):** is a patient classification system which classifies patients accordingly to selected variables like principle diagnosis, secondary diagnosis, age, gender, procedures performed & other morbid conditions. The IR-DRG is designed to include both in-patient and out-patient care, but can be used for in-patient alone. It is based mainly on procedure codes instead of diagnosis codes and include three levels of severity of illness. This will provide further granularity to reimburse providers based on resource consumption variant in a specific IR-DRG group.

**Level II of the HCPCS:** is a standardized coding system that is used primarily to identify products, supplies, and services not included in the CPT codes, such as ambulance services and durable medical equipment, prosthetics, orthotics, and supplies.

**NABIDH:** A health information exchange platform by the Dubai Health Authority that connects public and private healthcare facilities in Dubai to securely exchange trusted health information.

**RxNorm:** provides normalized names for clinical drugs and links its names to many of the drug vocabularies commonly used in pharmacy management and drug interaction software, including

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	8/17



those of First Databank, Micromedex, Multum, and Gold Standard Drug Database. By providing links between these vocabularies, RxNorm can mediate messages between systems not using the same software and vocabulary.

**Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT):** is a systematically organized computer-processable collection of medical terms providing codes, terms, synonyms and definitions used in clinical documentation and reporting. The primary purpose of SNOMED CT is to encode the meanings that are used in health information and to support the effective clinical recording of data with the aim of improving patient care, it includes clinical findings, symptoms, body structures, organisms and other etiologies, substances, pharmaceuticals, devices and specimens.

**The Logical Observation Identifiers Names and Codes for Laboratorians (LOINC):** is a common language (set of identifiers, names, and codes) for identifying health measurements, observations, and documents.

**Universal Numbering System (Dental):** The Universal Numbering System is a dental notation system for associating information to a specific tooth.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	9/17

## ABBREVIATIONS

**CDA** : Clinical Document Architecture

**CDT** : Current Dental Terminology

**CPT-4** : Current Procedural Terminology

**DHA** : Dubai health Authority

**HCPCS** : Healthcare Common procedure Coding System

**HIE** : Health Information Exchange

**HISHD** : Health Informatics and Smart health Department

**HL7** : Health Level Seven

**HRS** : Health Regulation Sector

**ICD-10-CM** : International Classification of Diseases, Tenth Revision, Clinical Modification

**IR-DRG** : International Refined-DRG

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	10/17

**LOINC** : The Logical Observation Identifiers Names and Codes for Laboratorians

**NCIRD** : National Center of Immunization and Respiratory Diseases

**SNOMED CT** : Systematized Nomenclature of Medicine Clinical Terms

**UNS** : Universal Numbering System (Dental)

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	11/17

## 1. BACKGROUND

The Standards for Clinical Data Coding and Terminology aims to fulfil health information requirements for health facilities to integrate with NABIDH Health Information Exchange (HIE); in order to position Dubai as a global medical destination by introducing a value-based, comprehensive, integrated and high-quality service delivery system.

## 2. SCOPE

2.1. All DHA licensed health facilities integrating with NABIDH.

## 3. PURPOSE

3.1. To ensure accurate and consistent patient information across different systems, by standardizing the Clinical Data Coding and Terminology in health sector in the Emirate of Dubai.

3.2. To ensure the efficient flow and exchange of health information in NABIDH; and warrant efficient data analysis due to unified coding.

3.3. To provide necessary NABIDH standards for implementing and managing HIE among DHA licensed healthcare providers in the Emirate of Dubai.

3.4. To support achieving better healthcare outcomes through facilitating data-driven decision-making process.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	12/17

#### 4. APPLICABILITY

4.1. DHA licensed healthcare professionals and health facilities accessing Nabidh HIE.

#### 5. STANDARD ONE: STANDARDIZING THE CLINICAL DATA CODING AND TERMINOLOGY

5.1. All health facilities integrating with or accessing to Nabidh shall adhere to DHA regulations and the United Arab Emirates laws.

5.2. Licensed health facilities deciding to integrate with Nabidh shall inform Health Information and Smart Health Department (HISHD) by submitting an application to [Nabidh@dha.gov.ae](mailto:Nabidh@dha.gov.ae) to obtain permission to initiate the Nabidh onboarding.

5.3. The health facility should use the following standardized nomenclatures and code sets to describe clinical problems, diagnosis, procedures, medications, and other Nabidh required datasets.

5.4. All Health Facilities must be in compliance with NABIDH published standards.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	13/17

Standard	Name of the standard	Publisher	Category	Mandate
<b>ICD 10-CM (Preferably version 2023, at least version 2021)</b>	International Classification of Diseases, Clinical Modification	CMS & NCHS	Diagnosis/Disease Coding	Required
<b>CPT 4 (Preferably version 2023, at least version 2021)</b>	Current Procedural Terminology	AMA	Procedures - medical, surgical, and diagnostic services	Required
<b>HCPCS Level II Preferably version 2023, at least version 2021)</b>	Healthcare Common Procedure Coding System Level II	CMS & AMA	Supplies, Disposable and Consumables	Required
<b>CDT (2023)</b>	Current Dental Terminology	ADA	Dental procedures and nomenclature	Required
<b>UNS (2022)</b>	Universal Numbering System (Dental)	ADA	Observations to a specific tooth	Required
<b>DDC</b>	Dubai Drug Code	DHA	Drugs and related (medications)	Required

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	14/17

<b>LOINC (2023)</b>	Logical Observation Identifiers Names and Codes	RI	Laboratory and Clinical Observations	Required
<b>LOINC CODE DEEDS (2023)</b>	Logical Observation Identifiers Names and Codes	RI	Data Elements for Emergency Department Systems (DEEDS)	Required
<b>CVX</b>	Vaccination Code Set	NCIRD	Product used in a vaccination	Required
<b>CDA</b>	Clinical Document Architecture	HL7	The representation of clinical documents (such as discharge summaries and progress notes)	Optional
<b>SNOMED CT (2023)</b>	Systematized Nomenclature of Medicine Clinical Terms	IHSTDO	Clinical Terminology/ Chronic Problems/ Diagnosis/Procedures/ Allergies	Optional
<b>RxNorm</b>	"Normalized" notations for clinical drugs	NLM	Clinical drugs and drug delivery devices	Optional
<b>IR-DRG v3.3</b>	International payment standard	CMS	Hospital coding/ Inpatient hospital payment	Optional

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	15/17

## REFERENCES

1. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM). Available on: <https://www.cms.gov/medicare/icd-10/2023-icd-10-cm> [Accessed May 2023].
2. The CPT-4 descriptive terms and identifying codes that are used to identify medical services and procedures. Available on: <https://www.ama-assn.org/amaone/cpt-current-procedural-terminology> [Accessed May 2023].
3. Healthcare Common procedure Coding System (HCPCS). Available on: <https://www.cms.gov/medicare/coding/HCPCS> [Accessed May 2023].
4. Current Dental Terminology (CDT). Available on: <https://www.ada.org/topic/cdt> [Accessed May 2023].
5. Universal Tooth Designation System; American Dental Association (*August 2022*). Available on: ["Universal Tooth Designation System"](#) (PDF). [Accessed May 2023].
6. The Logical Observation Identifiers Names and Codes for Laboratorians (LOINC). Available on: <https://loinc.org/> [Accessed June 2023].
7. Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT). Available on: <https://www.snomed.org/> [Accessed May 2023].
8. RxNorm, a standardized nomenclature for clinical drugs. Available on: <https://www.nlm.nih.gov/research/umls/rxnorm/index.html> [Accessed May 2023].

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	16/17



9. International Refined-DRG. Available on: [IRDRG](#) [Accessed June 2023].

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/ST-01	02	August 03, 2023	Nov 03, 2023	August 03, 2028	17/17