

Documentation for ICD-10 Data

Database Structure

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1. Revision History

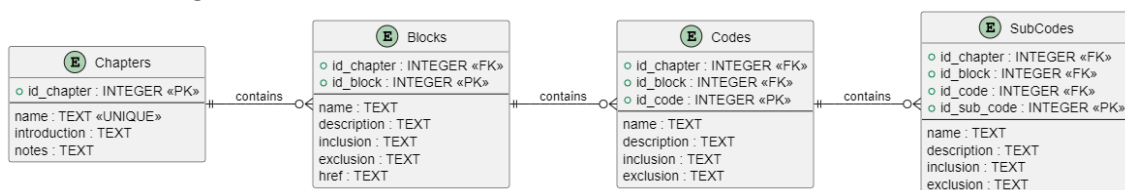
Version	Date	Author	Description
1.0	2024-10-13	Abel Parra	Creates document

2. Introduction

This document outlines the structured storage of data extracted from the ICD-10 Classification website (<https://icd.who.int/browse10/2016/en>) for use in future projects. The data is stored in an SQLite database specifically designed to represent the classification in a hierarchical structure, comprising Chapters, Blocks, Codes, and Sub-Codes. The document provides a detailed description of the database schema, including the tables and their relationships, accompanied by a diagram to illustrate the overall structure.

3. Diagram

Below is the diagram to visualize the database structure:



4. Tables Descriptions

Chapters Table

This table stores the high-level categorization of the ICD-10 classification, known as "Chapters". Each chapter represents an item in the left side menu:

Columns:

- **id_chapter (INTEGER, Primary Key):** A unique identifier for each chapter.
- **name (TEXT, Unique):** The name of the chapter.
- **introduction (TEXT):** An introduction or overview of the chapter's content.
- **notes (TEXT):** Additional notes or comments related to the chapter.

Blocks Table

The "Blocks" table stores subdivisions within each chapter. Each block groups related conditions or diseases.

Columns:

- **id_chapter (INTEGER):** Foreign key referencing chapters.id_chapter, indicating the chapter this block belongs to.
- **id_block (INTEGER, Primary Key):** A unique identifier for each block within a chapter.
- **name (TEXT):** The name of the block.
- **description (TEXT):** A description of the conditions or diseases covered by the block.
- **inclusion (TEXT):** Specifies what is included in this block.
- **exclusion (TEXT):** Specifies what is excluded from this block.
- **href (TEXT):** URL or reference link for more details about the block.

Codes Table

This table contains individual codes that classify specific conditions or diseases within a block.

Columns:

- **id_chapter (INTEGER):** Foreign key referencing chapters.id_chapter, indicating the chapter this code belongs to.
- **id_block (INTEGER):** Foreign key referencing blocks.id_block, indicating the block this code belongs to.
- **id_code (INTEGER, Primary Key):** A unique identifier for each code within a block.
- **name (TEXT):** The name or title of the code.
- **description (TEXT):** A detailed description of the condition or disease represented by the code.
- **inclusion (TEXT):** Specifies conditions included under this code.
- **exclusion (TEXT):** Specifies conditions excluded from this code.

Sub-Codes Table

The "Sub-Codes" table provides additional granularity to the classification, offering further breakdowns within a code.

Columns:

- **id_chapter (INTEGER):** Foreign key referencing chapters.id_chapter, indicating the chapter this sub-code belongs to.
- **id_block (INTEGER):** Foreign key referencing blocks.id_block, indicating the block this sub-code belongs to.
- **id_code (INTEGER):** Foreign key referencing codes.id_code, indicating the code this sub-code belongs to.
- **id_sub_code (INTEGER, Primary Key):** A unique identifier for each sub-code within a code.
- **name (TEXT):** The name or title of the sub-code.
- **description (TEXT):** A detailed description of the condition or disease represented by the sub-code.
- **inclusion (TEXT):** Specifies conditions included under this sub-code.

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- **exclusion (TEXT):** Specifies conditions excluded from this sub-code

Database Relationships

The database uses a hierarchical structure where:

- A Chapter can have multiple Blocks.
- A Block belongs to a specific Chapter and can have multiple Codes.
- A Code belongs to a specific Block and can have multiple Sub-Codes.
- A Sub-Code belongs to a specific Code within a Block.

5. Sample Data

This section includes screenshots of the database with the stored information.

Chapters

	id chapter	name	introduction	notes
	Filtro	Filtro	Filtro	Filtro
1	0	I Certain infectious and parasitic ...		
2	1	II Neoplasms		Notes...
3	2	III Diseases of the blood and blood...		
4	3	IV Endocrine, nutritional and ...		
5	4	V Mental and behavioural disorders		
6	5	VI Diseases of the nervous system		
7	6	VII Diseases of the eye and adnexa		
8	7	VIII Diseases of the ear and mastoi...		

Blocks

	id chapter	id block	name	description	inclusion	exclusion	href
	Filtro	Filtro	Filtro	Filtro	Filtro	Filtro	Filtro
1	0	0	A00-A09	Intestinal infectious diseases			https://icd.who.int/browse10/2016/...
2	0	1	A15-A19	Tuberculosis	infections due to Mycobacterium ...	congenital tuberculosis ...	https://icd.who.int/browse10/2016/...
3	0	2	A20-A28	Certain zoonotic bacterial diseases			https://icd.who.int/browse10/2016/...
4	0	3	A30-A49	Other bacterial diseases			https://icd.who.int/browse10/2016/...
5	0	4	A50-A64	Infections with a predominantly ...		human immunodeficiency virus [HIV] ...	https://icd.who.int/browse10/2016/...
6	0	5	A65-A69	Other spirochaetal diseases		leptospirosis (A27.-);syphilis (A50...	https://icd.who.int/browse10/2016/...
7	0	6	A70-A74	Other diseases caused by chlamydiae			https://icd.who.int/browse10/2016/...
8	0	7	A75-A79	Rickettsioses			https://icd.who.int/browse10/2016/...
9	0	8	A80-A89	Viral infections of the central ...		sequelae of:...	https://icd.who.int/browse10/2016/...
10	0	9	A92-A99	Arthropod-borne viral fevers and ...			https://icd.who.int/browse10/2016/...
11	0	10	B00-B09	Viral infections characterized by ...			https://icd.who.int/browse10/2016/...
12	0	11	B15-B19	Viral hepatitis		cytomegaloviral hepatitis ...	https://icd.who.int/browse10/2016/...
13	0	12	B20-B24	Human immunodeficiency virus [HIV] ...		asymptomatic human immunodeficiency...	https://icd.who.int/browse10/2016/...
14	0	13	B25-B34	Other viral diseases			https://icd.who.int/browse10/2016/...
15	0	14	B35-B49	Mycoses		hypersensitivity pneumonitis due to...	https://icd.who.int/browse10/2016/...
16	0	15	B50-B64	Protozoal diseases		amoebiasis (A06.-);other protozoal ...	https://icd.who.int/browse10/2016/...
17	0	16	B65-B83	Helminthiasis			https://icd.who.int/browse10/2016/...
18	0	17	B85-B89	Pediculosis, scabies and other ...			https://icd.who.int/browse10/2016/...
19	0	18	B90-B94	Sequelae of infectious and parasiti...			https://icd.who.int/browse10/2016/...
20	0	19	B95-B98	Bacterial, viral and other ...			https://icd.who.int/browse10/2016/...
21	0	20	B99-B99	Other infectious diseases			https://icd.who.int/browse10/2016/...
22	1	0	C00-C97	Malignant neoplasms			https://icd.who.int/browse10/2016/...
23	1	1	C00-C75	Malignant neoplasms, stated or ...			https://icd.who.int/browse10/2016/...
24	1	2	C00-C14	Malignant neoplasms of lip, oral ...			https://icd.who.int/browse10/2016/...

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Codes

	id_chapter	id_block	id_code	name	description	inclusion	exclusion
	Filtro	Filtro	Filtro	Filtro	Filtro	Filtro	Filtro
1	0	0	0	A00	Cholera		
2	0	0	1	A01	Typhoid and paratyphoid fevers		
3	0	0	2	A02	Other salmonella infections	infection or foodborne intoxication...	
4	0	0	3	A03	Shigellosis		
5	0	0	4	A04	Other bacterial intestinal ...		foodborne intoxications elsewhere ...
6	0	0	5	A05	Other bacterial foodborne ...		Clostridium difficile foodborne ...
7	0	0	6	A06	Amoebiasis	infection due to Entamoeba ...	other protozoal intestinal diseases...
8	0	0	7	A07	Other protozoal intestinal diseases		
9	0	0	8	A08	Viral and other specified intestina...		influenza with involvement of ...
10	0	0	9	A09	Other gastroenteritis and colitis o...		due to bacterial, protozoal, viral ...
11	0	1	0	A15	Respiratory tuberculosis, ...		
12	0	1	1	A16	Respiratory tuberculosis, not ...		
13	0	1	2	A17†	Tuberculosis of nervous system		
14	0	1	3	A18	Tuberculosis of other organs		
15	0	1	4	A19	Miliary tuberculosis	tuberculosis[disseminated,generaliz...	
16	0	2	0	A20	Plague	infection due to Yersinia pestis	
17	0	2	1	A21	Tularaemia	deer-fly fever;infection due to ...	
18	0	2	2	A22	Anthrax	infection due to Bacillus anthracis	
19	0	2	3	A23	Brucellosis	fever[Malta,Mediterranean,undulant]	

Sub-Codes

	id_chapter	id_block	id_code	id_sub_code	name	description	inclusion	exclusion
	Filtro	Filtro	Filtro	Filtro	Filtro	Filtro	Filtro	Filtro
1	0	0	0	0	A00.0	Cholera due to Vibrio cholerae 01, ...	Classical cholera	
2	0	0	0	1	A00.1	Cholera due to Vibrio cholerae 01, ...	Cholera eltor	
3	0	0	0	2	A00.9	Cholera, unspecified		
4	0	0	1	0	A01.0	Typhoid fever	Infection due to Salmonella typhi	
5	0	0	1	1	A01.1	Paratyphoid fever A		
6	0	0	1	2	A01.2	Paratyphoid fever B		
7	0	0	1	3	A01.3	Paratyphoid fever C		
8	0	0	1	4	A01.4	Paratyphoid fever, unspecified	Infection due to Salmonella ...	
9	0	0	2	0	A02.0	Salmonella enteritis	Salmonellosis	
10	0	0	2	1	A02.1	Salmonella sepsis		
11	0	0	2	2	A02.2	Localized salmonella infections	Salmonella[arthritis† ...	
12	0	0	2	3	A02.8	Other specified salmonella ...		
13	0	0	2	4	A02.9	Salmonella infection, unspecified		
14	0	0	3	0	A03.0	Shigellosis due to Shigella ...	Group A shigellosis [Shiga-Kruse ...	
15	0	0	3	1	A03.1	Shigellosis due to Shigella flexneri	Group B shigellosis	
16	0	0	3	2	A03.2	Shigellosis due to Shigella boydii	Group C shigellosis	
17	0	0	3	3	A03.3	Shigellosis due to Shigella sonnei	Group D shigellosis	
18	0	0	3	4	A03.8	Other shigellosis		
19	0	0	3	5	A03.9	Shigellosis, unspecified	Bacillary dysentery NOS	

Appendix A: Viewing the Database Content

The information stored in the SQLite database (.db file) can be easily viewed using an online SQLite viewer. To visualize the database content, follow these steps:

1. Visit the website: <https://inloop.github.io/sqlite-viewer/>.
2. Drag and drop the SQLite database file onto the web page.
3. The contents of the database will be displayed, allowing for easy exploration of the data structure and stored information.

This tool provides a user-friendly way to inspect the data without requiring additional software installations.