



dbMotion™

EHI Export Reference Guide

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Chapter 1

EHI Export overview

To comply with §170.315 (b)(10) Electronic Health Information (EHI) export certification criterion regulation, dbMotion™ supports the EHI Export functionality using standalone Agent Hub.

170.315 (b)(10) includes the ability to generate export files in a computable format for individual patients and entire patient populations.

This criterion is intended to provide patients and health IT users with a means to efficiently export the entire electronic health record for a single patient or all patients in a computable, electronic format, and facilitate the receiving health IT system's interpretation and use of the EHI, to the extent reasonably practicable using the developer's existing technology.

Under the Office of the National Coordinator for Health Information Technology (ONC) 21st Century Cures Act, Final Rule criterion §170.315(b)(10), patients and health IT users use EHI Export to efficiently export the entire electronic health record (EHR) for:

- Single patient
- Entire patient population

The dbMotion EHI Export documentation is publicly accessible and published at <https://www.alterahealth.com/legal/onc-reg-compliance/> and explains the export's format and the export process and user interface (UI).

Chapter 2

EHI Export permissions

A user's ability to generate export files is limited. Only permitted users can use the EHI Export feature.

The operation/task **Export Patient Data EHI Export** grants full permissions to export a single patient's data or the entire patient population data.

The operation or task should only be applied through the Security Management application to selected roles and only if EHI Export is required.

|| **Important:** Confidential information is also included.

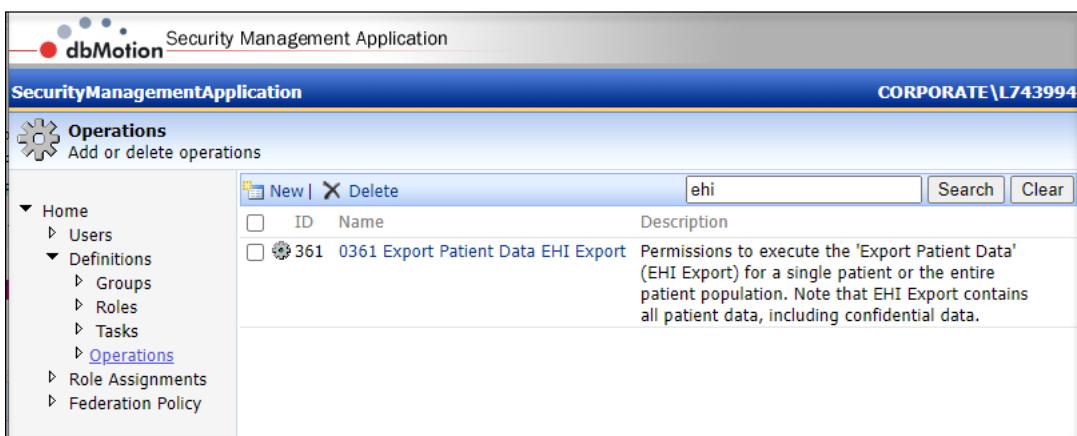
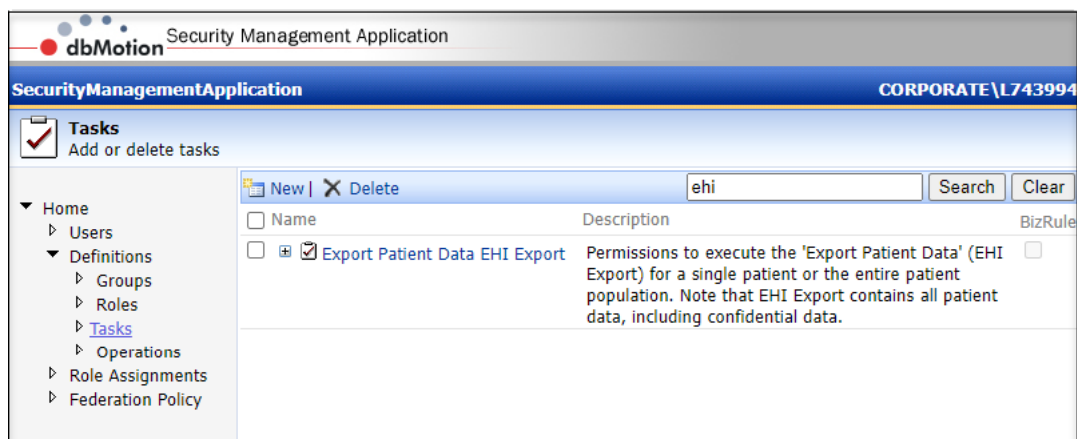
By default, this operation/task is not assigned to any role. This operation/task should be assigned to the role that should have these rights.

The ability to limit the health IT users' access to the EHI Export functionality is intended to be used by and at the discretion of the organization implementing the technology.

The **Export Patient Data EHI Export** task (0361 operation) is described as `Permissions to execute the 'Export Patient Data' (EHI Export) for a single patient or`

the entire patient population. Note that the EHI Export contains all patient data, including confidential data.

Figure 1: EHI Export task and operation in Security Management application

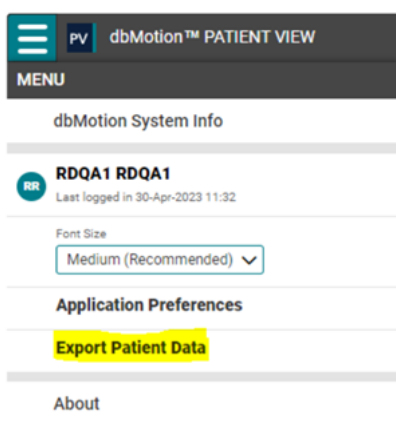


Chapter 3

Export Patient Data option


From the application menu, if a user's role has the permission to export patient data, the option **Export Patient Data** is available.

|| **Note:** See the topic "EHI Export permissions" for more information.



Clicking **Export Patient Data** opens a window where users can choose the data to export.

Export Patient Data

 You are attempting to export Protected Health Information (PHI). It is your responsibility to ensure you are in compliance with all federal, state, and local laws, guidance, and regulations.

Export data from:

☒ Current patient:
DOCUMENTFAMILY, Documentname | 06-Jun-2003 (20y) | Male | MRN document

☐ ALL patients

Check the categories you want to export:

☐ All Categories

☐ Allergies
☐ Imaging
☐ Medications

☐ Conditions
☐ Immunizations
☐ Patient Details

☐ Documents
☐ Labs and Pathology
☐ Procedures

☐ Encounters
☐ Measurements

Cancel

Export

Related concept information

[EHI Export permissions](#) on page 7

Chapter 4

Using the Export Patient Data option

When users select the **Export Patient Data** option from the application menu, an export window opens.

A menu of available and stored categories (data domains) in the dbMotion™ solution enables users to choose what data to include in the EHI Export.

A message is displayed about PHI:

You are attempting to export Protected Health Information (PHI). It is your responsibility to ensure you are in compliance with all federal, state, and local laws.

Export Patient Data

⚠ You are attempting to export Protected Health Information (PHI). It is your responsibility to ensure you are in compliance with all federal, state, and local laws, guidance, and regulations.

Export data from:

☒ **Current patient:**
DOCUMENTFAMILY, Documentname | 06-Jun-2003 (20y) | Male | MRN document

☐ **ALL patients**

Check the categories you want to export:

☐ All Categories

<input type="checkbox"/> Allergies	<input type="checkbox"/> Imaging	<input type="checkbox"/> Medications
<input type="checkbox"/> Conditions	<input type="checkbox"/> Immunizations	<input type="checkbox"/> Patient Details
<input type="checkbox"/> Documents	<input type="checkbox"/> Labs and Pathology	<input type="checkbox"/> Procedures
<input type="checkbox"/> Encounters	<input type="checkbox"/> Measurements	

Cancel **Export**

Select an export type

Two types of export are available:

- Single patient
- Patient population

Users can select to export the **Current patient** or **ALL patients**. If users do not have a patient in context, the option to select the current patient is unavailable.

Important: When running EHI Export for ALL patients, no active or open data loading should run.

Select the categories

After selecting the type of export, users must select which categories to export.

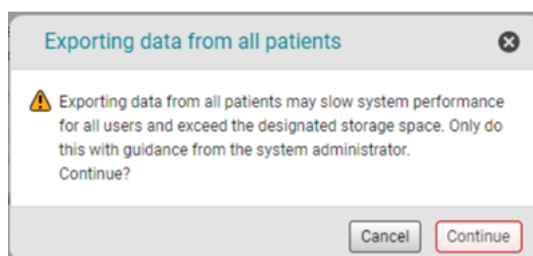
- When the **All Categories** check box is selected or cleared, all of the categories are selected or cleared.
- If **All Categories** is selected and the user clears a category, **All Categories** is cleared.

To export, click **Export**. The button is not available if no categories are selected.

If the **ALL Patients** option is selected, after clicking **Export**, a warning message is displayed:

Exporting data from all patients may slow system performance for all users and exceed the designated storage space. Only do this with guidance from the system administrator. Continue?

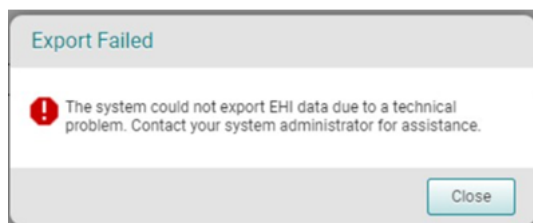
Users can click **Continue** to export data for all patients.



Export failure

If the export request fails, a system message is displayed:

The system could not export EHI data due to a technical problem. Contact your system administrator for assistance.



Refer to the *Events Reference Guide* for a list of EHI Export events.

Chapter 5

EHI Export in federated solutions

In a federated solution, the trigger comes from one node to all nodes, so one export request from any node triggers the export for each node separately.

- Single patient EHI export - Data is sent for all indexes in the patient's cluster.
- All patients EHI export - Data is sent for all indexes without knowing whose patients (clusters) they belong to. Clients can use the Initiate enterprise master patient index (EMPI) for patient clustering.

Note: In a federated solution, if the export was successful on at least one of the nodes, the notification of failure is not presented to the user in the application, but only in STL.

Chapter 6

EHI Export processing

After users request the data export, a backend process is triggered.

Before users can work with EHI Export, a shared folder must be created. Users must also be granted permission to access the folder.

The files and requests comply with defined properties and use defined parameters.

Client administrators control the shared location privileges. It is a prerequisite to have the shared location available to the user.

The client organization must also ensure enough storage space is available.

Processing is performed by the dbmEHI_Export job and Clinical domain and Master Data information is collected from the Clinical Data Repository (CDR).

The EHI Export process exports the data to CSV files. The files follow a user request and contain the reference files related to the request.

EHI Export shared folder

The EHI Export files are exported to a shared folder. With each request a new subfolder is created under the shared folder for each user.

Shared folder configuration and permissions

Before the dbMotion™ installation, configure the shared folder destination using the NODE_EHI_EXPORT_SHARED_FOLDER parameter. This parameter is part of the dbMotion™ system parameters. Refer to the *Installation Guide* for more information.

To permit creation of the folders and files, in SQL Server, grant **sysadmin** permission to **SQL Agent** and **service account** logins (for example: DBMOTION\dbmService4). This is a mandatory step for the EHI Export process.

Subfolder naming convention

The subfolder name contains the user Login Name. Under the subfolder, additional folders containing the request ID and datetime (when the request was made with resolution of minutes) are found.

When the export type is **Single**, the path is \@SharedFolder\@LoginName\RequestId_RequestDate\

When the type is **All**, a chunk mechanism is used and for each chunk a new folder is created. The path is `\@SharedFolder\@LoginName\RequestId_RequestDate\Chunk_ChunkNo_out_of_AllChunks\`

|| **Note:** Chunk size for **All** Patients is 100,000 patients.

See the "Chunk mechanism" section in the "Patient data collection" topic for more information.

Error processing

If the process fails when creating the folder, or the process fails to write to the folder, an error is raised, and the event is published to the STL (Stability Tracking Log or Supportability and Testability Log).

Refer to the *Events Reference Guide* for a list of EHI Export events.

Related concept information

[Patient data collection](#) on page 18

EHI Export file definition

The EHI Export files contain the requested data and conform to the specified format, size, and delimiters.

File format	CSV
File size	400,000 rows per file. If the table contains more rows, several files are created with the name of the table + file number.
Row delimiters	Carriage return (CR) and line feed (LF)
Column delimiter	Comma (,)
Value indication	Double quotation marks (" ")

EHI Export request parameters

EHI Export requests are created in the database and saved in the EHI_Export.RequestRegistration table.

In the EHI_Export.RequestRegistration table, the request parameters are saved.

Parameters	Description
@Type	The request type (Single patient or All patients).
@PatientList	For a Single patient the parameter contains a list of the roots and extensions related to the selected patient. For ALL patients the parameter returns NULL.
@CategoryList	List of domains that are requested by the user.
@UserName	The user that requested the export.
@LoginName	The user login name that requested the export.

Use the EHI_Export.RequestRegistration table to explore each request and to find how to access the files. The request can be for a single patient or for all patients.

dbmEHI_Export job

After a request, the dbmEHI_Export job starts the process of extracting files.

Important: By default, the dbmEHI_Export job is **disabled**. Before using EHI Export, enable the job. To enable the job, right-click the job and click **Enable**.

The job:

- Checks if an unfinished request exists and processes it.
- Checks for any pending requests. Any existing requests are processed; if none exist, the job is ended.
- Parses the patient list and populates the EHI_Export.RequestPatients table.
- Updates the EHI_Export.RequestRegistration table status to **Started**.
- If **All** patients is requested, populates the EHI_Export.AllPatientChunk table with range of PatientRecordID.
The job runs for every chunk and populates the EHI_Export.RequestRegistration table accordingly.
- The job progress is updated in the EHI_Export.Log table for the data extract (such as for the Clinical Domains Data and the Master Data) and the export process (to the CSV files).
- Runs every two minutes.
- When the job is finished, the status in the EHI_Export.RequestRegistration is updated accordingly. See the statuses in the "Export process overview" topic.
- To cancel the EHI Export request, stop the dbmEHI_Export job.

Related task information

[Export process overview](#) on page 19

Patient data collection

Relevant patient data is collected from the Clinical Data Repository (CDR) database according to the user request.

The job extracts the data according to the parameters in the EHI_Export.RequestRegistration table.

The requests are processed in the order in which they arrive in the queue, and the data is extracted and outputted in the same order.

Clinical domains

For each Clinical domain, the job:

- Checks that the domain (category requested) exists in the CategoryList in the EHI_Export.RequestRegistration table for the current request.
- Updates status in the EHI_Export.Log table with the Domain Name, **Started** status, and current date.
- Populates the domain tables from the CDR database to the relevant tables in the dbmUtils database EHI_Export schema.
- Collects Master Data and populates Master Data keys.
- Updates status in the EHI_Export.Log table with the Domain Name, **Finished** status, and current date.
- If the Clinical domain returns without data, updates with Domain Name, **Finished No Data** status, and current date.
- If the process fails, updates status in the EHI_Export.Log table with the Domain Name, **Failed** status, error message, and current date.

Master Data domain

For each Master Data domain, the job:

- Checks that the Master Data Key tables have data.
- Updates status in the EHI_Export.Log table with the Master Data Name, **Started** status, and current date.
- Populates the Master Data tables from the CDR database using relevant Master Data Key tables.
- Updates status in the EHI_Export.Log table with the Master Data Name, **Finished** status, and current date.

- If the process fails, updates status in the EHI_Export.Log table with the Master Data Name, **Failed** status, error message, and current date.
 - If the request type is **Single**, populates the lookup tables with related information.
 - If the request type is **All**, populates the lookups tables with all information contained in the CDR and exists only in the first chunk.

Chunk mechanism

The Clinical domains and Master Data domain are also relevant for the Chunk mechanism. For each chunk, the job:

- Uses a chunk mechanism to export the requested data by chunks for **All** patient scenarios.
- Contains 100,000 patients in each chunk with clinical data files relevant to these patients.
- In the user's subfolder within the shared folder, creates and numbers additional subfolders per chunk (chunk number out of total chunks).

Note: If one of the domains fails in one of the chunks, does not retrieve the domain in the subsequent chunks.

Export process overview

Patient data from the tables is exported to a CSV file. The files are exported to the shared destination folder configured by the customer.

To export data to a file, the job process:

1. Creates the subfolder in the shared destination folder.
See the "EHI Export shared folder" topic.
2. Exports all relevant tables to files.
3. Populates the Summary table.
4. Exports the table to a Summary file. See the "Summary file" topic.
The Summary file export is the indication to users that the process is finished as it is the last file that is outputted.

Note: For an **All** patients request, a Summary file is exported for each chunk and another Summary file exported to summarize the EHI Export request.

5. Updates status in the EHI_Export.RequestRegistration table.
The statuses are:

Status	Description
Pending	EHI Export request is waiting in the queue.
Started	Process started.
Finished	The tables are populated, and files have reached their destination. EHI Export process is finished.
Partially Completed	Some of the domains failed. EHI Export process is finished.
Failed	EHI Export process failed.

6. Publishes events to STL and ADR.

Status	Event	Description
Finished	Event “EHI Export process completed” will publish.	Occurs when the EHI Export process completed.
Partially Completed	Event “EHI Export process is partially completed” will publish.	Some of the domains failed. Occurs when the EHI Export process is partially completed (process completed with errors).
Failed	Event “EHI Export request failed on database” will publish.	The EHI Export failed on database because job is disabled or cannot create subfolder.

Related concept information

[Summary file](#) on page 20

Summary file

The Summary file summarizes the entire export request.

The Summary file contains:

- Metadata of the EHI Export request.
 - Request ID – the EHI Export Request identification.
 - User name – name of the user that requested the EHI Export.
 - Request type – **Single** patient or **All** patients.
 - Patient list – for **Single** list of the patient identifiers; for **All** patients returns NULL.

- Hyperlink to the publicly posted documentation.
The EHI Export documentation can be found [ONC Regulatory Compliance](#) page.
- The Clinical Data and Master Data exported based on the category requested. For each category the released files are listed.
- Updated date – time of the request.
- Last status for each domain that was requested.

Status	Description
Finished	The files for the domain have been exported successfully.
Finished no data	No data was found for the requested domain.
Failed	Data export failed for the domain.

- Error Details – detail of the error if the category failed.

Note: For an **All** patients request, a Summary file is exported for each chunk and another Summary file is exported to summarize the EHI Export request.

Documentation file

The Documentation file contains the hyperlink to the EHI Export documentation. This file is exported for each request.

Example for EHI Export request

User requests EHI Export for **Single** patient for the categories **Allergies** and **Medications**.

The EHI Export process exports the Clinical domain and Master Data files that are relevant to the shared folder. The Summary file and the Documentation file are also exported.

L > dbMotion Shared > EHI_Export > Phitest8@dbMotion.loc > 3_202311190309				Search 3_202311190309
Name	Date modified	Type	Size	
Summary_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	2 KB	
EHIExportDocumentationHyperlink.csv	11/19/2023 10:10 AM	Microsoft Excel C...	1 KB	
[dbmUtils].[EHI_Export].[Medications]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	3 KB	
[dbmUtils].[EHI_Export].[MedicationPerformers]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	1 KB	
[dbmUtils].[EHI_Export].[MaterialRole]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	1 KB	
[dbmUtils].[EHI_Export].[Master_Organization]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	1 KB	
[dbmUtils].[EHI_Export].[Master_MedicalStaff]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	1 KB	
[dbmUtils].[EHI_Export].[Master_Material]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	1 KB	
[dbmUtils].[EHI_Export].[Master_DomainHierarchy]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	4 KB	
[dbmUtils].[EHI_Export].[Master_Device]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	1 KB	
[dbmUtils].[EHI_Export].[Master_CodeSystemConcepts]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	4 KB	
[dbmUtils].[EHI_Export].[Allergies]_1.csv	11/19/2023 10:10 AM	Microsoft Excel C...	3 KB	

In the Summary file, for the **Medications** category, the request was **Finished** and contains three CSV files:

- [dbmUtils].[EHI_Export].[Medications]_1.csv
- [dbmUtils].[EHI_Export].[MedicationPerformers]_1.csv
- [dbmUtils].[EHI_Export].[MaterialRole]_1.csv

	A	B	C	D	E	F
1	ID	RequestID	Details	Updatedate	LastStatus	ErrorDetails
2	1	3	User name: Phitest8@dbMotion.loc, Request Type: single, Patient List: 2.16.840.1.113883.3.57.1.3.5.52.1.8.6.56664689	Nov 19 2023 3:09AM		
3	2	3	https://www.alterahealth.com/legal/onc-reg-compliance	Nov 19 2023 3:09AM		
4	3	3	Allergies - Tables: EHI_Export.Allergies	Nov 19 2023 3:10AM	Finished	
5	4	3	Codes: Tables EHI_Export.Master_CodeSystemConcepts, EHI_Export.Master_DomainHierarchy	Nov 19 2023 3:10AM	Finished	
6	5	3	Device: Table EHI_Export.Master_Device	Nov 19 2023 3:10AM	Finished	
7	6	3	Material: Table EHI_Export.Master_Material	Nov 19 2023 3:10AM	Finished	
8	7	3	MedicalStaff: Table EHI_Export.Master_MedicalStaff	Nov 19 2023 3:10AM	Finished	
9	8	3	Medications - Tables: EHI_Export.Medications, EHI_Export.MedicationPerformers, EHI_Export.MaterialRole	Nov 19 2023 3:10AM	Finished	
10	9	3	Organization: Table EHI_Export.Master_Organization	Nov 19 2023 3:10AM	Finished	
11						

For **Allergies**, the data was also exported, with a status of **Finished**.

Master Data is also exported and displayed in the Summary file with status **Finished**.

EHI Export files dictionary

The EHI Export process exports the data to CSV files. The files follow a user request and contain the reference files related to the request.

To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft® Excel® format.

The Clinical files are exported for each category according to the user request.

Category name	Files
Patient Details	EHI_Export.Master_Patient EHI_Export.Master_PatientIdentifier EHI_Export.Master_PatientName EHI_Export.Master_PatientAddress EHI_Export.Master_PatientTelecommunication EHI_Export.Master_PatientConfidentiality
Conditions	EHI_Export.Conditions
Encounters	EHI_Export.Encounter EHI_Export.AttenderPractitioner EHI_Export.CoveredParty EHI_Export.Transfers
Labs and Pathology	EHI_Export.LaboratoryEvent EHI_Export.LaboratorySpecimenMaterial EHI_Export.LaboratoryResults EHI_Export.LaboratoryText EHI_Export.MicrobiologyFinding EHI_Export.PathologyFinding
Measurements	EHI_Export.Measurement EHI_Export.MeasurementPerformers
Procedures	EHI_Export.Procedures EHI_Export.ProcedurePerformers
Medications	EHI_Export.Medication EHI_Export.MedicationPerformers EHI_Export.MaterialRole
Immunizations	EHI_Export.Immunizations EHI_Export.ImmunizationPerformers
Documents	EHI_Export.ClinicalDocuments EHI_Export.ClinicalDocumentParticipantOrganization EHI_Export.ClinicalDocumentPerformers EHI_Export.ClinicalDocumentTextPart

Category name	Files
Allergies	EHI_Export.Allergies
Imaging	EHI_Export.Imaging EHI_Export.ImagingValues EHI_Export.ImagingPerformers EHI_Export.ImagingStudyPerformers

The Master Data and Confidentiality files related to the Clinical domain requested are also exported to comply with the user's request.

Organization	EHI_Export.Master_Organization
Codes	EHI_Export.Master_CodeSystemConcepts EHI_Export.Master_DomainHierarchy
MedicalStaff	Master_MedicalStaff
Device	EHI_Export.Master_Device
Code_DescriptorCodes (for all domains)	EHI_Export.CDQ_Code EHI_Export.CDT_Code
Material	EHI_Export.Master_Material
Microorganism	EHI_Export.Master_Microorganism
Confidentiality (for all domains)	EHI_Export.Confidentiality

Master_Patient file

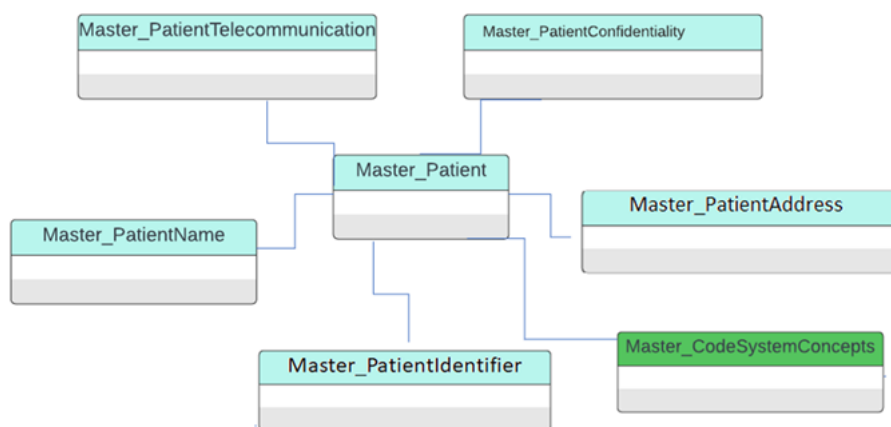
The Master_Patient file displays data about the patient. The file combines the patient's demographic data using all the patient's identifier details as received in the messages (the Golden Record data).

Patient demography in the EHI Export is derived from the Provider Registry (PPOL) and Clinical Data Repository (CDR) databases. The data from the Provider Registry includes all indexes. The last updated index reflects the patient's Golden Record. The CDR does not calculate the patient's Golden Record and sends all the patient indexes to the EHI Export. However, if different demographic attributes exist in both the Provider Registry and in the CDR, the CDR is considered the true source and overrides the demography from the Provider Registry.

To summarize, the Master_Patient file in the EHI Export always shows the index that represents the patient's Golden Record as derived from the Provider Registry. It is the last updated patient

index in the enterprise master patient index (EMPI) that the Provider Registry views. If the patient data is not yet in PPOL, the data in the CDR is considered Golden and is displayed in the EHI Export file.

Figure 2: Master_Patient schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft® Excel® format.

All the files are linked to the Master_Patient file. The data is received in the messages with the cluster indication taken from the Patient file.

File	Description
Master_PatientIdentifier	The patient's identifiers
Master_PatientConfidentiality	The patient's confidentiality identifiers
Master_PatientName	The patient's names
Master_PatientAddress	The patient's address
Master_PatientTelecommunication	The patient's telecommunications

Master_MedicalStaff file

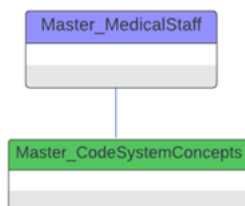
The Master_MedicalStaff file displays data about the care provider.

The care provider's demographic data is combined from all the provider's identifier details as received in the messages (the Golden Record data).

The Master_MedicalStaff file describes the care provider identifiers as received in the messages or lookups Microsoft® Excel® with the cluster indication taken from the CareProvider file.

If the project does not supply the linkage data for Medical Staff, the file will represent one record in the Master_MedicalStaff file.

Figure 3: Master_MedicalStaff schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft® Excel® format.

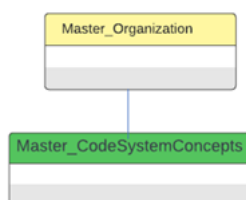
Master_Organization file

The Master_Organization file displays data about the organization providing care.

The Master_Organization file contains the care Organization data combined from all the organization's identifier details as received in the messages and displays the Organization's identifiers as received in the messages or lookup Microsoft® Excel® with the cluster indication taken from the Organization file.

If the project does not supply the linkage data for organization, each record will represent one record in the Master_Organization file.

Figure 4: Master_Organization schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft® Excel® format.

Codes file

The Codes file is represented by Master_CodeSystemConcepts and Master_DomainHierarchy.

Figure 5: Codes schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft® Excel® format.

File	Description
Master_CodeSystemConcepts	<p>The clinical and administrative codes that are in the Clinical Data Repository (CDR) (received in the messages) and the baseline codes from the Common Terminology Service (CTS).</p> <p>The file describes the links (relationships) between the concepts codes as defined in the relevant configuration table.</p>
Master_DomainHierarchy	The Master_CodeSystemConcepts file is linked to the Master_DomainsHierarchy file.

Code_Descriptor file

The Code_Descriptor file is represented by CDQ_Code and CDT_Code files.

The Concept_Descriptor code represents any kind of vocabulary code related to a vocabulary domain and consist of code, code display name, and code system.

Figure 6: Code_Descriptor schema

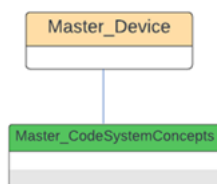


To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

Master_Device file

The Master_Device file displays data about the source system (device) that sent the message.

Figure 7: Master_Device schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

Master_Microorganism file

The Master_Microorganism file contains information about the evaluated Microorganism according to the MicrobiologyFinding file.

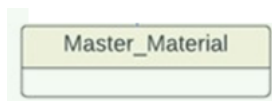
Figure 8: Master_Microorganism schema



Master_Material file

The Master_Material file contains information about the Material according to the Medications, Immunizations, and Labs.

Figure 9: Master_Material schema



Confidentiality file

The Confidentiality file displays data about patient confidentiality.

The file contains all the clinical acts (from the acts tables) that have a confidentiality level.

All the Confidentiality acts data will be exported in the same Confidentiality file.

To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft® Excel® format.

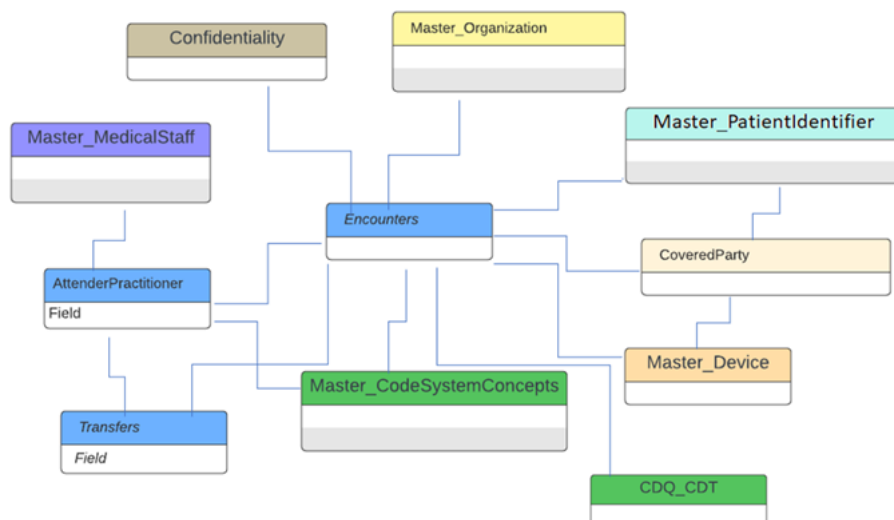
Encounters file

The Encounters file displays data about the encounter acts.

The Encounters file displays data about Encounters of specific patients as received from the Clinical Data Repository (CDR).

Because each Encounter can include several medical participants in one Encounter act, the participant care providers are provided in the AttenderPractitioner file.

Figure 10: Encounters schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

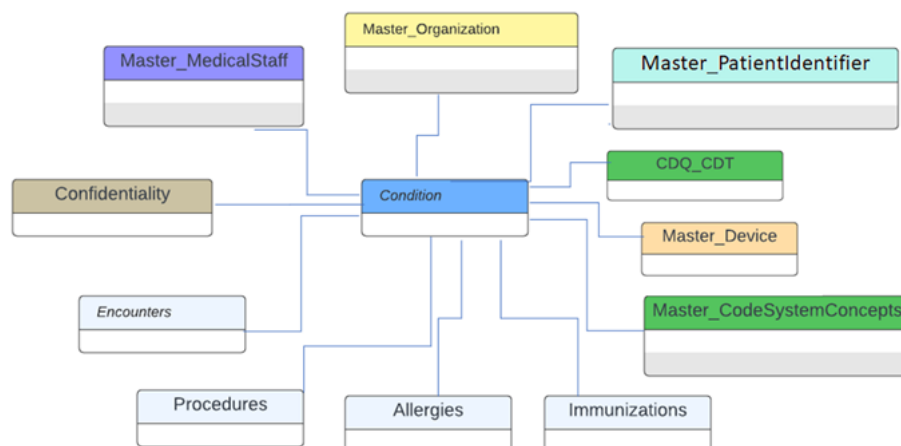
File	Description
AttenderPractitioner	The healthcare practitioners who were involved in a patient's care during a patient Encounter or specific Service Provider Unit (transform) that is related to the Encounter (depending on how the data is received in the message).
Transfers	Data about the Service Provider Unit (SPU) to which the patient is assigned during the Encounter. There can be more than one for each Encounter.
CoveredParty	The insurance details related to the patient within a specific Encounter.

Conditions file

The Conditions file displays data about the patient's medical condition.

A condition can be a diagnosis, a problem, or the past medical history.

Figure 11: Condition schema



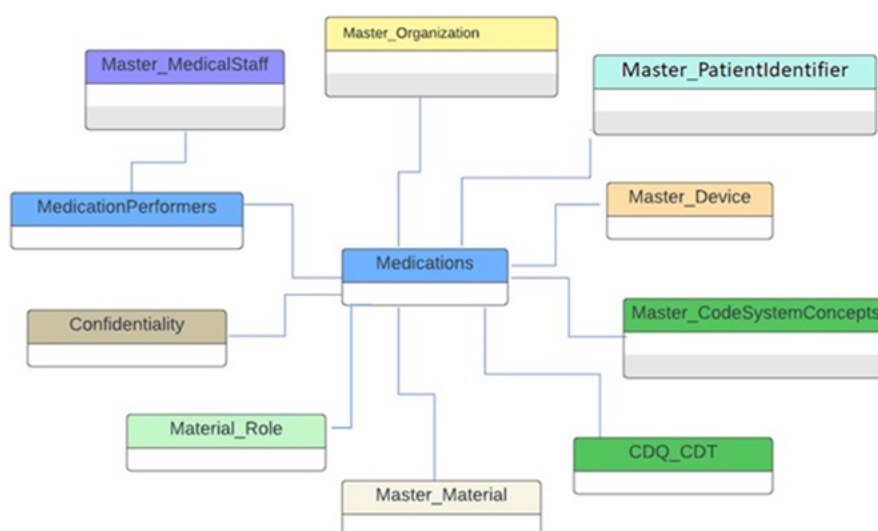
To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

Medications file

The Medications file displays data about the acts of prescribing or dispensing a medication, or otherwise applying a substance to the patient.

If the project does not provide the relationship between the acts of prescribing and dispensing, this data is not reflected in the Clinical Data Repository (CDR) or the EHI Export files.

Figure 12: Medications schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

All the files are linked to the Medications file.

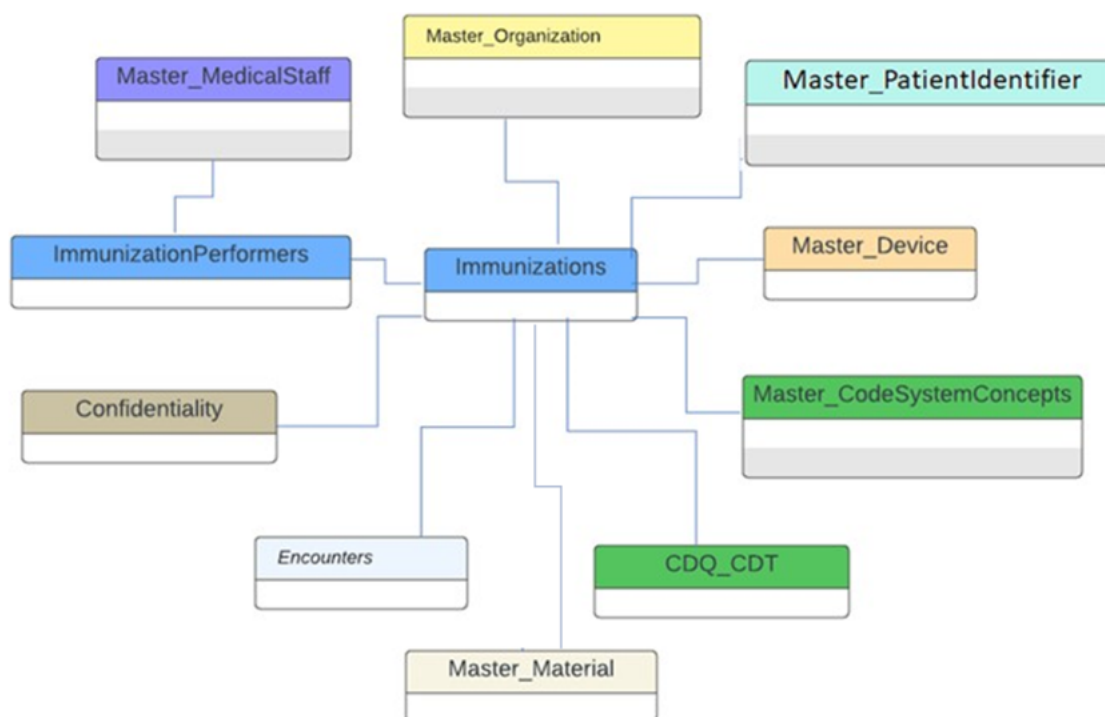
File	Description
MedicationPerformers	The medical staff members who participated in the medication act. Usually, they are the medication's authors and performers, but can also be other participants.

File	Description
Material_Role	<p>The material and its role in the Medication file. This file adds the ability to represent compound medications. It enables linking several materials to one compound medication.</p> <p>If a compound medication is loaded into a medication's domain tables, the general medication element is loaded into the Medication table and also to the MedicationRole table with a GEN MaterialRoleClassCode. In addition, all other medication elements (INGR) are also loaded to MedicationRole table with the applicable MaterialRoleClassCode. All the ingredients in MaterialRole point to the materialId through the ParentMaterialId.</p> <p>In case of a regular medication, the material is loaded to both the Medication table and MaterialRole table with the GEN as the MaterialRoleClassCode.</p>

Immunizations file

The Immunizations file displays data about acts of giving an immunization to a patient, including all relevant information describing the immunization.

Figure 13: Immunizations schema



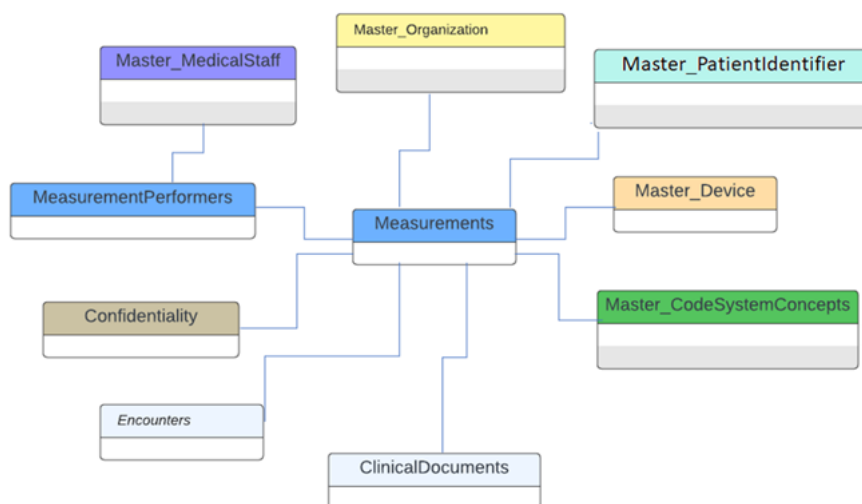
To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft® Excel® format.

File	Description
ImmunizationPerformers	The medical staff members who participated in the Immunization act.

Measurements file

The Measurements file displays clinical data about measurement acts as defined in the projects and imported to the Clinical Data Repository (CDR). This data includes vital signs, test results, and so on.

Figure 14: Measurements schema



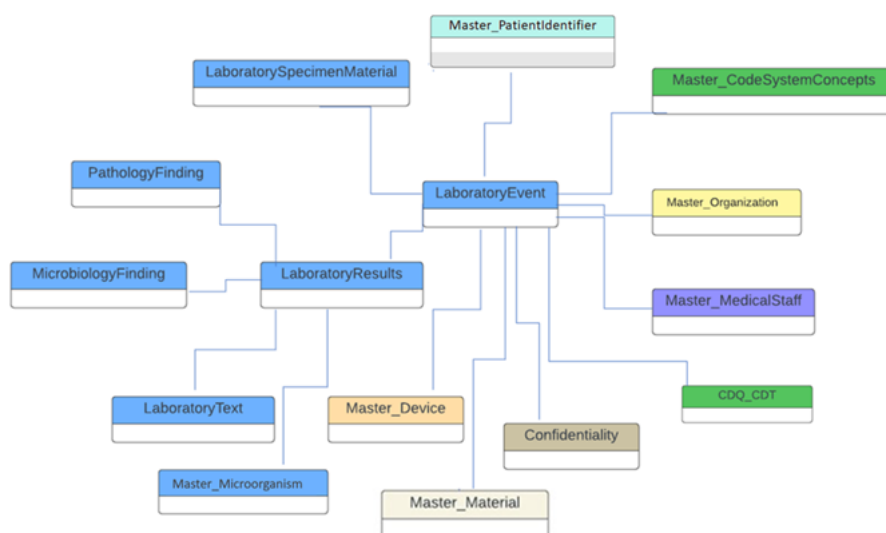
To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

File	Description
MeasurementPerformers	The medical staff who participated in the measurement act.

Labs and Pathology file

The Labs and Pathology file provides information about the lab event. The LaboratoryEvent is related to the LaboratoryRequest.

Figure 15: Labs and Pathology schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft® Excel® format.

File	Description
LaboratoryText	This data type is for complex data such as multimedia data, XML files, and so on.
LaboratoryResults	Information about the specimen observations result. The results are derived from the lab event and can be related to the request that initiated the event.
MicrobiologyFinding	Represented by the MicrobiologyFinding, which describes Information about the microbiology result findings based on the Lab Event, for example, the bacteria found and their susceptibility.

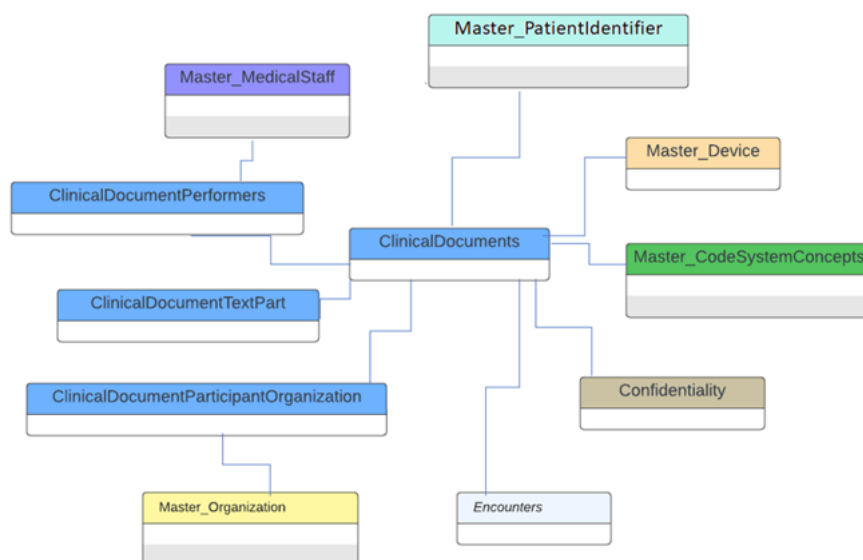
File	Description
PathologyFinding	Represented by the PathologyFinding, which describes Information about the Pathology finding based on the Lab Event, for example, tissue examination results.
LaboratorySpecimenMaterial	Information about the specimen material (aliquot or isolate) on which the observation was made.

Documents file

The Documents file provides information about clinical documents of clinical observations and services and administrative issues. For example, discharge summary, discharge instructions, progress notes, and more.

Important: The dbMotion™ database only stores the location (reference) of the clinical document. The client's server is where the actual documents are stored. Using the EHI Export process, the clinical document's location (reference) is exported. Using the document reference, the user can access the actual document.

Figure 16: Documents schema



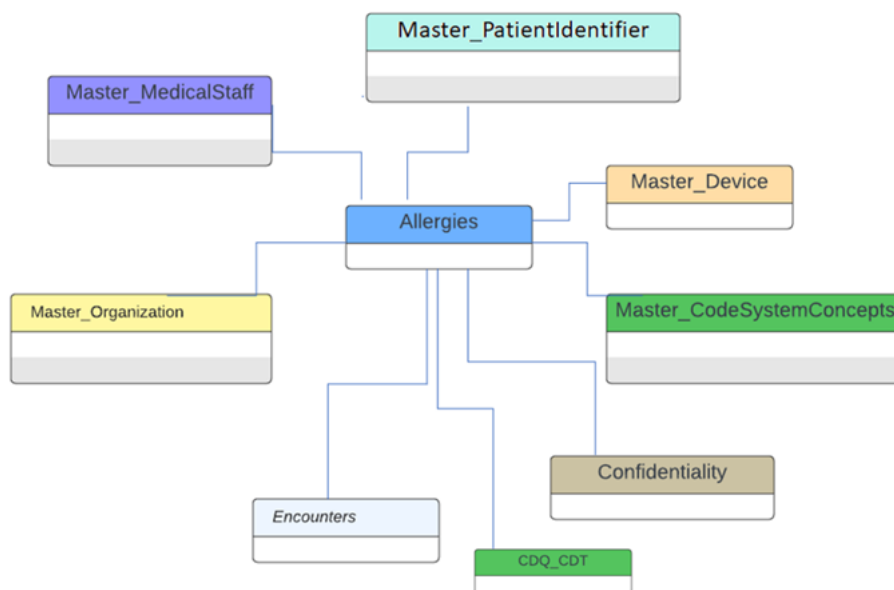
To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

File	Description
ClinicalDocumentTextPart	The different sections of the document.
ClinicalDocumentPerformers	The medical staff members who participated in generating the document. Usually they are the document's authenticators but can also be other participants.
ClinicalDocumentParticipantOrganization	The participant organizations that played a role in the document act.

Allergies file

The Allergies file contains information about the patient's drug and non-drug allergies, including the reaction, severity, and so on.

Figure 17: Allergies schema

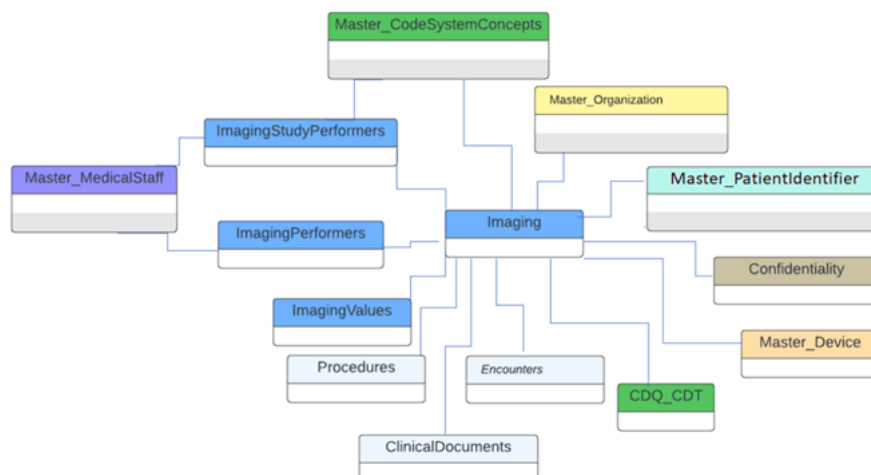


To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

Imaging file

The Imaging file provides detailed information about a specific diagnostic Imaging act that has been carried out on a patient.

Figure 18: Imaging schema



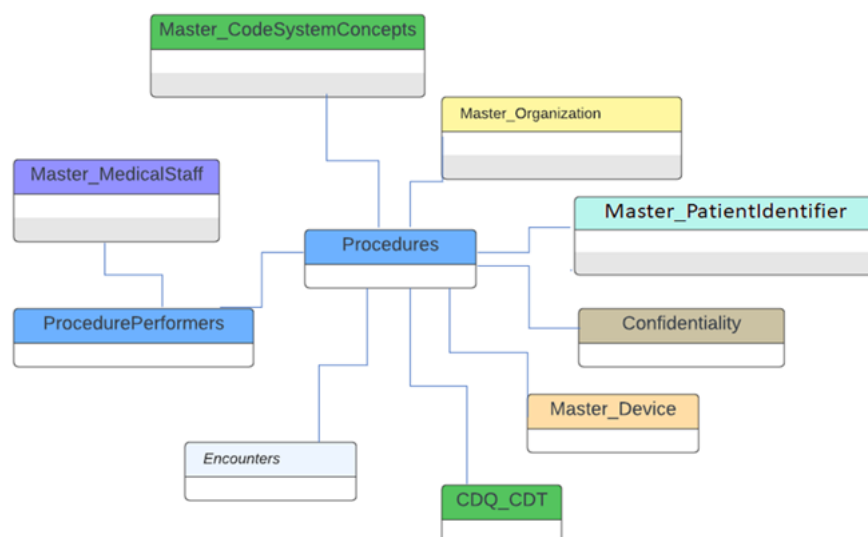
To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

File	Description
ImagingValues	Enables storing of an image (for example, a chest X-ray) or a film (for example, coronary angiography or cardiac echo) as alternative online binary data or as a reference to an external address where the data can be downloaded on demand.
ImagingPerformers	The medical staff members who participated in the imaging act. Usually, it is the caregiver that is the performer of the imaging act.
ImagingStudyPerformers	The medical staff members who participated in the Imaging Study act. Usually, it is the caregiver that gives the interpretation of the imaging act.

Procedures file

The Procedures file displays the surgical, diagnostic, and other procedures that are performed on a patient.

Figure 19: Procedures schema



To view the attributes of each file, refer to the *dbMotion EHI Consolidated Data Files* in Microsoft[®] Excel[®] format.

File	Description
ProcedurePerformers	The medical staff who participated in the procedure.

For more information

For more information and the most up-to-date documentation, access the Product Documentation portal from the following website: [Client Portal](#).

1. Sign in to the Client Portal website.
 - If you have a Client Portal account, enter the user name and password, and then click **Sign in**.
 - If you do not have a Client Portal account, click **Create one!**
2. Go to **Product Documentation > Search Documentation**.
3. On the Product Documentation portal landing page use the search field and filters to find your document, or click a product tile, and then a version tile to display all the documents for that product version.
 - a) From Filters, select the product or document type on which to search for documentation.
 - b) In the search field, enter search criteria.
The search field uses predictive searching. As you type, topics that match the criteria are displayed below the search field.
4. To complete the search, perform one of the following actions:
 - Click the magnifying glass.
 - Select one of the topics displayed beneath the search box.

Search results are displayed in the main pane. Use the filters under Refine Results to further narrow the results. For example, select **Feature Guides** from **Document Type** to display only topics that are included in a feature guide.
5. Click a topic title to open the topic in the context of the book indicated by the product, version, and document type tags that are displayed beneath the title.

Note: If a topic is included in more than one book, a list of the books in which the topic is included is displayed beneath the label **Also available in**. Select the applicable book from the list. The topic opens in the context of that specific publication.

What to do next

Navigate the Product Documentation portal using multiple methods. From the top of the portal landing page, click **Getting Started** to learn more about using the portal.