**Medex – eMediAtt**

**Requirements for an incapacity notification for Medex**

**Version 2.4**

**21/12/2021**

# **History**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Author | Version | Comments |
| 28/01/2016 | Marianne Beyers | 0.1 | Medex Requirements for an eMediAtt adapted to language of the data transmitted via eHealth platform |
| 26/02/2016 | Marianne Beyers | 0.2 | Version updated with remarks of Robin Bosman |
| 01/03/2016 | Marianne Beyers | 0.5 | Version updated with remarks of Robin Bosman and François Van Hees |
| 03/03/2016 | Marianne Beyers | 0.6 | Version updated with remarks of Robin Bosman |
| 09/03/2016 | Marianne Beyers | 0.7 | Added a constraint on accident date/ request date for dossier of occupational disease: must be equal or before the beginmoment of the incapacity period. |
| 6/04/2016 | Marianne Beyers | 1.0 | 1. Free comment zone: removed: Folder/transaction/item/content/text2. Value “incapacityrelapse”: removed in Folder/transaction/cd (TRANSACTION-TYPE):  |
| 20/05/2016 | Marianne Beyers | 1.1 | Added identification of eHbox of Medex |
| 18/07/2016 | Marianne Beyers | 1.2 | Sex of patient is not mandatory any more.  |
| 29/03/2018 | Marianne Beyers | 2.0 | Adaptations for Multi-eMediAtt |
| 14/11/2019 | Marianne Beyers | 2.1 | Adaptations for verification of INAMI/RIZIV number of a doctor |
| 22/11/2021 | Marianne Beyers | 2.2 | Value “incapacityrelapse”: added again in Folder/transaction/cd (TRANSACTION-TYPE) |
| 01/12/2021 | Marianne Beyers | 2.3 | Adaptations for Multi-eMediAtt project planned for production September 2022. |
| 21/12/2021 | Marianne Beyers | 2.4 | Adaptations for Multi-eMediAtt project; Meta Data and Custom Meta Data. |

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# **Description**

## GOAL

Goal of this document is to list constraint over data that will go through the eMediAtt process from Doctors to Medex using EH-Box. This are the Incapacity Notifications that have as recipient “Medex”, or recipient with eHbox id = 1990002015.

## REQUIREMENTS FROM MEDEX

In order to bring added value from the automatic transfer of certificate’s (eMediAtt’s), controls have to be set in the first step of the process (encoding by the doctor) to avoid:

* Correction workload by Medex agents
* Feedback mailing to Patients if content of the certificate is not valid.

Certificate’s not compliant to specifications listed on this document will not be treated and forwarded to Medex automatically.

They will be treated manually by an administrative agent.

A System Administrator will contact software provider’s responsible of delivering non-valid data.

## constraints for an eMediAtt

eHealth box of Medex:

The messages have to be sent to Medex’s eHBox, its destinationContext properties are :
- type                = EHP

- quality           = INSTITUTION\_EHP
- id                   = the eHbox ID of Medex   = 1990002015

Messages with destination Medex, sent to another eHbox will not be processed, and even cannot be opened because a security certificate must be installed to be possible to read the messages.

Meta Data-Custom Meta Data:

Initially only **Custom Meta Data** where defined and mandatory for an eMediAtt message.

* MessageType=IncapacityNotification
* MessageVersion=1.0 or 2.0
* MessageFormat=FPS HFCSE

For the multi-eMediAtt project **Meta Data** have been defined and are mandatory for a multi-eMediAtt message.

* CM-DocumentType: Values of KMEHR CD-Transaction (value = notification)
* CM-DocumentSubType: Values of KMEHR CD-TransactionType (values = incapacity OR incapacityextension OR incapacityrelapse)
* CM-ID-KMEHR: The value of the Kmehr ID-KMEHR

Medex accepts messages with the correct Custom Meta Data and with correct Meta Data.

This means that Medex will continue to accept the current messages that are already sent in production, also after start of the Multi-eMediAtt project.

For your info: the order of checking Custom Meta Data and Meta Data is the following:

Medex system first checks the presence and content of following **Custom Meta data**

* MessageType=IncapacityNotification
* MessageVersion=1.0
* MessageFormat=FPS HFCSE

When not found/not correct system checks the presence and content of the **Meta Data** defined and mandatory for the Multi-eMediAtt project:

* CM-DocumentType: Values of KMEHR CD-Transaction (value = notification)
* CM-DocumentSubType: Values of KMEHR CD-TransactionType (values = incapacity OR incapacityextension OR incapacityrelapse)
* CM-ID-KMEHR: The value of the Kmehr ID-KMEHR (text value, content is not checked here, but taken over of the KMEHR message)

When not found/not correct system checks the presence and content of following **Custom Meta data**

* MessageType=IncapacityNotification
* MessageVersion=2.0
* MessageFormat=FPS HFCSE

When Custom Meta data and Meta Data are all present, system treats the message when the first set of correct values is found. The other values are ignored in that case.

For the Multi-eMediAtt project, the possible destinations for the eMediAtt must be found in the DAAS directory of eHealth, in contrast to the eMediAtts that are sent directly to the eHbox of Medex.

The treatment by Medex system of Multi-eMediAtt message and eMediAtt message is identical.

For info on the Multi-eMediAtt project see: <https://www.ehealth.fgov.be/ehealthplatform/nl/service-mult-emediatt>

Necessary info can be found in the Mult-eMediatt Cookbook.

Attachments of the message

Different attachments are possible, but at least one xml document that can be identified as a KHMER xml document must be present.

A pdf with the data in the XML document is recommended in case the incapacity notification cannot be treated automatically.

### Validations of the KHMER xml document:

* It must correspond to a standard KMEHR message

Errors on KMEHR validation received in the past are mainly:

* + Certain data are case sensitive e.g. values defined in reference table for the CD element. E.g.CD-ITEM, ID-KMEHR, ID-HCPARTY, LOCAL etc..
	+ In an eMediAtt no address data are mandatory, but when an address is mentioned certain fields are mandatory , like street number (tag must be present but can be empty)….….
* eHealth developed a schematron that can be built in the software to verify the structure of an incapacity notification. See

<https://www.ehealth.fgov.be/standards/kmehr/en/page/schematron>

* List of data and constraints (specific for Medex):

Header part:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Field and Path in KHMER** | **Specific KHMER Definition** | **Type** | **Constraint** |
| standard | Header/standard/cd | S = "CD-STANDARD" SV = "1.8">20121001 | String | Mandatory |
| Id | Header/Id | S = "ID-KMEHR" SV = "1.0">11530231003.201112210907000000 | Number | MandatoryContains RIZIV number of the sender , followed by a “.” and a unique number that identifies the eMediAtt  |
| DateTime | Header/Date |  | date (KMEHR standard) | Mandatory |
| Header/time |  | time (KMEHR standard) | Mandatory |
| Sender’s software | Header/sender/hcparty/id | S="LOCAL" SV="5.2.1" SL="MyUsualSoftware" | String | Mandatory Contains Software name and version |
| Header/sender/hcparty/cd | S="CD-HCPARTY" SV="1.0" |  | Mandatoryvalue = application |
| Header/sender/hcparty/name |  |  | MandatoryContains software name |
| Doctors info | Header/sender/hcparty/id | S = "ID-HCPARTY" SV = "1.0" | Number(11) | Must contain doctors RIZIV number.RiZIV number or SSIN is mandatoryMust comply with modulo 97, 89, 83 or 79See <https://www.inami.fgov.be/fr/professionnels/autres/fournisseurs-logiciels/Pages/default.aspx> |
| Header/sender/hcparty/id | S = "INSS" SV = "1.6" | Number (11) | Must contain doctors SSIN number.RiZIV number or SSIN is mandatoryMust comply with modulo 97 |
| Header/sender/hcparty/cd | S = "CD-HCPARTY" SV = "1.6" |  | Mandatoryvalue = persphysician |
| Recipient = Medex | Header/sender/hcparty/cd | S = "CD-HCPARTY" SV = "1.6" |  | MandatoryValue = application |
|  | Header/sender/hcparty/name |  |  | MandatoryValue = medex |

Folder part

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Field and Path in KHMER** | **Specific KHMER Definition** | **Type** | **Constraint** |
| Id | Folder/Id | S = "ID-KMEHR" SV = "1.0" |  | Mandatory |
| Patient SSIN | Folder/patient/id | S = "ID-PATIENT" SV = "1.0" | String (11)  | MandatoryAlphanumeric field that must contain 11 numbersMust correspond to Modulo 97 |
| Patient first name | Folder/patient/firstname |  | String | The tag firstname is mandatory, but it can be left empty when person has no first name |
| Patient family name | Folder/patient/familyname |  | String | Mandatory |
| Patient language | Folder/patient/usuallanguage |  | String | MandatoryPossible values: fr, nl, de, en |

Transaction part

When doctors info is not found in the transaction part, Medex takes the doctors info in the header part. For a standard KMEHR the author of the transaction is mandatory, so for an incapacity notification for Medex usually both parts contain the doctors info.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Field and Path in KHMER** | **Specific KHMER Definition** | **Type** | **Constraint** |
| Transaction info | Folder/transaction/id | S = "ID-KMEHR" SV = "1.0" |  | Mandatory |
| Folder/transaction/cd  | S = "CD-TRANSACTION" SV = "1.5" | String  | MandatoryValue = notification |
| Folder/transaction/cd | "CD-TRANSACTION-TYPE" SV = "1.1" | String | MandatoryPossible values:* incapacity
* incapacityextension
* incapacityrelapse
 |
| Date used as certificate date in Medex | Folder/transaction/date |  | Date | Mandatory |
| Folder/transaction/time |  | Time | Mandatory |
| Doctors info | Folder/transaction/author/hcparty/id | S = "ID-HCPARTY" SV = "1.0" | Number(11) | Must contain doctors RIZIV number.RIZIV number or SSIN is mandatoryMust comply with modulo 97, 89, 83 or 79See <https://www.inami.fgov.be/fr/professionnels/autres/fournisseurs-logiciels/Pages/default.aspx> |
| Folder/transaction/author/hcparty/id | S = "INSS" SV = "1.6" | Number (11) | Must contain doctors SSIN number.RIZIV number or SSIN is mandatoryMust comply with modulo 97 |
| Folder/transaction/author/hcparty/cd | S = "CD-HCPARTY" SV = "1.6" |  | MandatoryValue = persphysician |
|  | Folder/transaction/iscomplete |  |  | MandatoryValue = true |
|  | Folder/transaction/isvalidated |  |  | MandatoryValue = true |

Item part

Two items are mandatory: **Incapacity** and **diagnosis**

Information about an hospitalization is optional; and 4 items are used to describe the hospitalization:

Incapacity item:

Only one **incapacity** items is possible, it must have in Folder/transaction/item/cd/content/incapacity/cd the value = “work”.

The values allowed in “Folder/transaction/item/content/incapacity/incapacityreason/cd” are strictly limited to the list defined below for a eMediAtt for Medex.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Field and Path in KHMER** | **Specific KHMER Definition** | **Type** | **Constraint** |
| Id | Folder/transaction/item/id | S = "ID-KMEHR" SV = "1.0" |  | Mandatory |
| Cd | Folder/transaction/item/cd | S = "CD-ITEM" SV = "1.6" | string | MandatoryValue = incapacity |
|  | Folder/transaction/item/content/incapacity/cd | S = "CD-INCAPACITY" SV = "1.1" | string | MandatoryValue = work |
|  | Folder/transaction/item/content/incapacity/incapacityreason/cd | S = "CD-INCAPACITYREASON" SV = "1.1" | string | MandatoryPossible values:

|  |
| --- |
| * illness
 |
| * ~~hospitalization~~ (still accepted by Medex but not to be used for Multi eMediAtt)
 |
| * ~~sickness~~ (still accepted by Medex but not to be used for Multi eMediAtt)
 |
| * pregnancy
 |
| * workaccident
* traveltofromworkaccident
 |
| * occupationaldisease
* accident (this is a “privat” accident, no work accident)
 |

 |
|  | Folder/transaction/item/content/incapacity/outofhomeallowed |  |  | MandatoryPossible values:

|  |
| --- |
| * true
 |
| * false
 |

 |
|  | Folder/transaction/item/content/date |  |  | Optional fieldBut **mandatory** when incapacityreason = workaccident or traveltofromworkaccident; this field must contain the accident date.when incapacityreason = occupationaldisease this field must contain the request date for a dossier for occupatialdesease.This date must be < or = beginmoment of the incapacity period. |
|  | ~~Folder/transaction/item/content/text~~ |  | ~~string~~ | ~~Optional~~ This field is not used by Medex |
|  | Folder/transaction/item/beginmoment/date |  | date | MandatoryBeginmoment must be < or = End moment |
|  | Folder/transaction/item/endmoment/date |  | date | Mandatory |

Note for consultation in the DAAS (routing module of eHealth for the Multi eMediAtt project)

* The **incapacity reason** must be given as option in the DAAS request. The only reasons accepted for this request are
	+ work accident
	+ illness
	+ occupational disease

For incapacity reasons

* + illness
	+ pregnancy
	+ accident

The request to the DAAS must put as “cause” = ‘illness’

For incapacity reasons

* + workaccident
	+ traveltofromworkaccident

The request to the DAAS must put as “cause” = ‘workaccident’

For incapacity reason

* + occupationaldisease

The request to the DAAS must put as “cause” = ‘occupationaldisease’

**The incapacity reason that must be sent to Medex must have the value the doctor selected in the software.**

* The dates NotBefore and NotOnOrAfter must be given in the request to the DAAS.
	+ Notbefore = beginmoment
	+ NotOnOrAfter = endmoment + 1 day.

For the request to the DAAS.

**The days that must be sent to Medex are beginmoment and endmoment of the incapacity period.**

Diagnosis item:

A **Diagnosis** item is mandatory and more than one is allowed

The diagnosis can be described by a text field. This property is optional (This is free text and the doctor can describe different diagnoses)

The main diagnosis must be defined by a code. Because different coding system exists, the coding system and version must be mentioned.

When a code is filled in, the coding system and version are mandatory. Coding system is put in attribute “S”, Coding version is put in attribute “SV” example

S = "ICD" SV = "10">R05

Note : for the moment the Medex system accepts that diagnosis is described either by a text field or by a code, or by both. In the future the code will become mandatory.

Description of one item “Diagnosis”:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Field and Path in KHMER** | **Specific KHMER Definition** | **Type** | **Constraint** |
|  | Folder/transaction/item/id | S = "ID-KMEHR" SV = "1.0" |  | Mandatory |
|  | Folder/transaction/item/cd | S = "CD-ITEM" SV = "1.6" | string | MandatoryValue = diagnosis |
|  | Folder/transaction/item/cd | S="LOCAL" SL="MMEDIATT-ITEM" SV="1.0" | string | Optional Value = principalBut when present, it can be present for only 1 diagnosis item. |
| Diagnosis in Code form; differed examples | Folder/transaction/item/content/cd | S = "ICD" SV = "10" | string | At least one CD is mandatory |
| Folder/transaction/item/content/cd | S = "ICPC" SV = "2" | string |  |
| Folder/transaction/item/content/cd | S = " CD-SNOMED " SV = "2" | string |  |
| Diagnosis in text | Folder/transaction/item/content/text | L = "nl" | string | Optional |

When the extra cd element <cd S="LOCAL" SV="1.0" SL="MMEDIATT-ITEM">principal</cd>is present, this diagnosis item is considered as the “main” diagnosis, otherwise, the first diagnose item we receive will be considered as “main” diagnose.

Items concerning a Hospitalization, different items possible:

Information about an hospitalization is optional information.

The doctor can specify the name of the hospital, the address and the start date and end date of hospitalisation.

Medex will only use the start and end date of the hospitalization.

To identity the hospitalization the first item is mandatory and if this item is present the 2 items with start and end date of the hospitalization are taken over when the fields contain a correct date.

Hospitalisation: item 1; item “encountertype”

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Field and Path in KHMER** | **Specific KHMER Definition** | **Type** | **Constraint** |
|  | Folder/transaction/item/id | S = "ID-KMEHR" SV = "1.0" |  | Mandatory |
|  | Folder/transaction/item/cd | S = "CD-ITEM" SV = "1.11" | string | MandatoryValue = encountertype |
|  | Folder/transaction/item/content/ | S="**CD-ENCOUNTER**" SV="**1.1**"  | string | MandatoryValue = **hospital** |

Hospitalisation: item 2; item “encounterdatetime"

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Field and Path in KHMER** | **Specific KHMER Definition** | **Type** | **Constraint** |
|  | Folder/transaction/item/id | S = "ID-KMEHR" SV = "1.0" |  | Mandatory |
|  | Folder/transaction/item/cd | S = "CD-ITEM" SV = "1.11" | string | MandatoryValue = encounterdatetime |
| Start date hospitalisation | Folder/transaction/item/content/date |  | Date | MandatoryContains the start date of hospitalization. The date must be < or = the end date of hospitalisation |

Hospitalisation: item 3: item: “dischargedatetime" ; Complete Item is optional or date can be empty when end date of hospitalization is not yet known.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Field and Path in KHMER** | **Specific KHMER Definition** | **Type** | **Constraint** |
|  | Folder/transaction/item/id | S = "ID-KMEHR" SV = "1.0" |  | Mandatory |
|  | Folder/transaction/item/cd | S = "CD-ITEM" SV = "1.11" | string | MandatoryValue = dischargedatetime |
| Start date hospitalisation | Folder/transaction/item/content/date |  | Date | optionalContains the end date of hospitalization.  |

The items with the name and address of the hospital are not used by Medex.