



# **OpenMRS EPTS Retrospective**

## **Report Requirements**

### **Data Quality Report**

**Version 1.7**



# Version

Date	Version	Description	Author
April 29, 2019	1.0	Initial creation of document	Maria Rein
May 14, 2019	1.1	Updates and comments added	Pinki Meggi Zainabe Dadá
May 23, 2019	1.2	FGH comments accepted	Eurico José
June 7, 2019	1.3	Edits from PEPFAR	Maria Rein , Joel Chehab
June 28, 2019	1.4	Comments accepted. New comments added. Reviewed the 15 checks list. EC13 removed: The patient's entered date of birth, entered age and estimated age do not align Technical details added for all 15 checks. Added missing translations added.	Pinki Meggi
July 1, 2019	1.5	New criteria added EC20. Some translations added. Technical Requirements added	Pinki Meggi
August 6, 2019	1.6	EC16-EC20 revised Translations added Technical Requirements added	Pinki Meggi
August 26, 2019	1.7	Minor edits from PEPFAR, the edit check - The patient's entered date of birth, entered age and estimated age do not align, was removed as these do align in EPTS , added health facility name in output	Maria Rein

# Approvals and Sign-off

## Approvals Panel

Version	Approver	Approved by	Date
1.7	CDC		

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# 1 Introduction

## 1.1 Purpose

The purpose of this document is to define the requirements for the EPTS Data Quality Report.

## 1.2 Scope and Key Assumptions

The Data Quality Report will generate an aggregate list of patient's failing to meet certain edit checks in addition to providing a line listing of patients who fail to meet a particular edit check so clinical staff can review the patient file to correct the information in the EPTS system.

The key assumptions are:

- The most recent version of Open MRS EPTS is installed
- The EPTS concept dictionary is harmonized with the EPTS metadata server
- While there are many edits checks that need to be included in this report, for this first version will include the top fifteen data quality issues identified when conducting analysis.
- The rules will be displayed in English and Portuguese

## 1.3 Definitions

An "edit check" is a rule in the system such as the patient's date of birth must be before the patient's date of death.

# 2 Report Definition

## 2.1 Description

The report will be titled "Data Quality Report v2"

## 2.2 Report Level and Frequency

The report can be generated on an ad hoc basis by the user. The PEPFAR M&E team will provide guidance regarding the frequency of generation.

## 2.3 Report Indicators

Edit Check	Description
EC1	The patient's sex is male and the patient is pregnant
EC2	The patient's sex is male and the patient is breastfeeding
EC3	The patient's vital status is dead and the patient has an ART pick up date after the date of death or death notification
EC4	The patient's vital status is dead and the patient has a clinical consultation after date of death or death notification
EC5	The patient's vital status is dead and the patient has a laboratory result (specimen collection date or test order date) after the date of death or death notification / entry into EPTS.
EC6	The patient has been identified as transferred out but has an ART

	pick up date after the transfer out date
EC7	The patient has been identified as transferred out but has an clinical consultation date after the transfer out date
EC8	The patient has been identified as transferred out but has an laboratory results(specimen collection date or report date) after the transfer out date
EC9	The patient has been identified as abandoned but has an ART pick up date after the abandoned date
EC10	The patient has been identified as abandoned but has an clinical consultation date after the abandoned date
EC11	The patient has been identified as abandoned but has an laboratory results(specimen collection date or report date) after the abandoned date
EC12	The patient's date of birth, estimated date of birth or entered age indicate the patient was born before 1920
EC13	The patients date of birth, estimated date of birth or age is negative
EC14	The patients birth, estimated date of birth or age indicates they are > 100 years of age
EC15	The patient's date of birth is after any drug pick up date
EC16	The patients date of birth is after any clinical consultation date
EC17	The date of drug pick up is before 1985
EC18	The date of clinical consultation is before 1985
EC19	The date of laboratory test specimen collection date or the date the clinician ordered the test is before 1985
EC20	The patient is not enrolled in TARV Program (SERVICO TARV TRATAMENTO) and has drugs pick up or clinical consultation recorded in the system.

## 3 Requirements Definition

### 3.1 Report Properties

Property	Description
<b>Name</b>	Data Quality Report v.1.0
<b>Description</b>	<p>This report provides a line listing of patient records failing to meet certain edit checks and allows the user to review the information so the patient's information can be corrected.</p> <p><b>Descrição:</b> Este relatório gera uma listagem de pacientes que não atendem a determinadas verificações/validações dos dados existentes no sistema, e permite que os utilizadores confirmem as informações na ficha de seguimento(??) do paciente de modo a corrigir o sistema.</p>
<b>Parameters</b>	<p><b>Start Date and End Date</b> The start and end date allows the user to select the range of when a patient was first entered into the system. For example, patients entered in 2017 and 2018. A user could select January 1, 2017 for the start date and December 31, 2018 for the end date. The user could include the typical start and end dates by reporting quarter ( ie September 21 to Dec 20 for Q1, Dec 21 to March 20 for Q2, March 21 to June 20 for Q3, June 21 to Sep 20 for Q4.</p> <p><b>Type of patients</b> The system will also allow the user to select all patients, active and transferred in patients only, abandoned patients or transferred out patients.</p> <p><b>Location</b> The system will allow the user to select 1 facility, multiple health facilities or request a report for all health facilities.</p> <p><b>Output Options</b> Web Preview = the system will allow the user to view the output information on the screen Data Quality Report = the system will allow the user to download the output information to an Excel;</p> <p>When the report should be run The system will allow the user to run the report immediately or schedule the report to be run later.</p>
<b>Report Output</b>	Attached

### Run or Schedule this report

Start date:

End date:

Location:  ▼

Output To:  ▼

When should this report be run?  *Immediately*

## 3.2 List of Report Requirements

[Update the enclosed table - defined]

Requirement #	Category/ Functional Area	Requirement
#FR_1	Report	The system will generate a report called "Data Quality Report v1".
#FR_2	Report	<p>The report will contain the following description on the screen:</p> <p><b>English - Data Quality Report v1</b></p> <p>This report provides a line listing of patient records failing to meet certain edit checks and allows the user to review the information so the patient's information can be corrected.</p> <p><b>Portuguese - Relatório de Qualidade de Dados v1</b></p> <p>Este relatório gera uma listagem de pacientes que não atendem a determinadas verificações/validações dos dados existentes no sistema, e permite que os utilizadores confirmem as informações na ficha de seguimento do paciente de modo a corrigir o sistema.</p>
#FR_3	Report - parameters	The system will allow a user to select a start date and an end date allowing the user to determine the patients they would like included in the report based on when they were entered into the system or allow the user to select All patients.
#FR_4	Report-parameters	The system will allow the user to select a location, multiple locations (district or province), or all locations.
#FR_5	Report-parameters	The system will allow the user to select the report output



		<ul style="list-style-type: none"> <li>- View on the screen</li> <li>- Output as an Excel File</li> </ul>
		If the user choses to save as a file, the system will provide a message asking them to define the location of where they want to save the file
<b>#FR_6</b>	Report-parameters	The system will allow the user to schedule the report or run the report immediately
<b>#FR_7</b>	Report-parameters	If the user choses to schedule the report, the system will allow the user to select the date from calendar and run the report at that date.
<b>#FR_8</b>	Report-display	The system will display the Report History, so the user can see when the report was run last.
<b>#FR_9</b>	Report-content	The report will contain the following indicators as specified in the edit check section 2.3
<b>#FR_10</b>	Report-content	The report will produce a summary or aggregate report by health facility that will display the range the user selected "patients entered within a certain period" or "all patients"
<b>#FR_11</b>	Report-parameters	<p>The system will allow the user to select the following types of patients:</p> <p>All Active / Transferred In Transferred Out Abandoned</p> <p><b>User can select multiple</b></p>
<b>#FR_12</b>	Report-content	See Section 4.1 for an example of the summary output
<b>#FR_13</b>	Report-content	<p>The report will contain the following edit checks, see section 2.3</p> <p>The report will display a line listing of patients failing to meet the edits check, see Section 4.2 for the specifications of what should be displayed in the line listing.</p>

## 4 Technical Specifications

### 4.1 Report Output

The Summary Report will contain the following:

**Title: Data Quality Summary Report**

Location Name:

Report Generation Date:

Start Date and End Date <of the patients who were entered in the system or indicate all patients were selected >

The number of patients in the system for this health facility included active (which includes transferred in) transferred out and abandoned during the specified time period

The table below including the number of patients meeting each edit check

<b>Edit Check</b>	<b>Description</b>	<b># patients meeting this criteria</b>
EC1	The patient's sex is male and the patient is pregnant	#
EC2	The patient's sex is male and the patient is breastfeeding	#
EC3	The patient's vital status is dead and the patient has an ART pick up date after the date of death or death notification	#
EC4	The patient's vital status is dead and the patient has a clinical consultation after date of death or death notification	#
EC5	The patient's vital status is dead and the patient has a laboratory result (specimen collection date or test order date) after the date of death or death notification / entry into EPTS.	#
EC6	The patient has been identified as transferred out but has an ART pick up date after the transfer out date	#
EC7	The patient has been identified as transferred out but has an clinical consultation date after the transfer out date	#
EC8	The patient has been identified as transferred out but has an laboratory results(specimen collection date or report date) after the transfer out date	#
EC9	The patient has been identified as abandoned but has an ART pick up date after the abandoned date	#
EC10	The patient has been identified as abandoned but has an clinical consultation date after the abandoned date	#
EC11	The patient has been identified as abandoned but has an laboratory results(specimen collection date or report date) after the abandoned date	#
EC12	The patient's date of birth, estimated date of birth or entered age indicate the patient was born before 1920	#
EC13	The patients date of birth, estimated date of birth or age is negative	#
EC14	The patients birth, estimated date of birth or age indicates they are > 100 years of age	#
EC15	The patient's date of birth is after any drug pick up date	#
EC16	The patients date of birth is after any clinical consultation date	
EC17	The date of drug pick up is before 1985	#
EC18	The date of clinical consultation is before 1985	#
EC19	The date of laboratory test specimen collection date or results report date is before 1985	#

EC20	The patient is not enrolled in TARV Program (SERVICO TARV TRATAMENTO) and has drugs pick up or clinical consultation recorded in the system	
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After the summary report, the system will output a line listing of the patients who meet the criteria:

The title of the report will include the following:

Data Quality Line Listing Report / Lista de Pacientes do Relatório de Qualidade de Dados

EC1	The patient's sex is male and the patient is pregnant
EC1	<i>O sexo do paciente é masculino e o paciente está grávido</i>

**#FR\_EC1 The patient's sex is male and the patient is pregnant**

The system will identify all the male patients (patient.sex=male) and who are pregnant as following criteria's:

- PC1- Patients marked as "PREGNANT" (*OBS CONCEPT ID = 1982 = value = Gestation*) in the initial consultation (*encounter id =5*) or follow-up consultation (*encounter id =6*); or
- PC2- Patients who have "Number of weeks Pregnant" (*OBS CONCEPT ID = 1279=value=any*) registered in the initial consultation (*encounter id =5*) or follow-up consultation (*encounter id =6*) or
- PC3- Patients who have "Pregnancy Due Date" (*OBS CONCEPT ID = 1600=value=any*) registered in the initial consultation (*encounter id =5*) or follow-up consultation (*encounter id =6*) or
- PC4- Patients started/enrolled on PTV/ETC program (*program.id=8 and program.end\_date=null*).

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS) , Pregnant Criteria (PC1,PC2,PC3), Consultation Date, PTV/ETC Enrollment Date, PTV/ETC Program Enrollment Status

\*Patient Date of Birth will indicate if it was entered or estimated

**#FR\_EC2 The patient's sex is male and the patient is breastfeeding**

EC2	The patient's sex is male and the patient is breastfeeding
EC2	<i>O paciente é do sexo masculino e esta a amamentar</i>

The system will identify all the male patients (patient.sex=male) and who are breastfeeding as following criteria's:

- BC1- Patients who have the “Delivery date” (*OBS CONCEPT ID = 5599= value= any date*) registered in the initial (*encounter id =5*) or follow-up consultations (*encounter id =6*) or
- BC2- Patients who have started ART for being breastfeeding as specified in “CRITÉRIO PARA INÍCIO DE TRATAMENTO ARV” (*OBS CONCEPT ID = 6334 = LACTACAO (6332)*) in the initial (*encounter id =5*) or follow-up consultations (*encounter id =6*) or
- BC3- Patients who have registered as breastfeeding (*CONCEPT ID 6332=yes*) in follow up consultation (*encounter id =6*) or
- BC4- Patients enrolled on PTV/ETC program (*program.id=8*) with state 27 (gave birth).

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS), Last update, Breastfeeding Criteria, Consultation Date, PTV/ETC Enrollment Date, PTV/ETC Program Enrollment Status

\*Patient Date of Birth will indicate if it was entered or estimated

### **#FR\_EC3 The patient’s vital status is dead and the patient has an ART pick up date after the date of death or death notification**

EC3	The patient’s vital status is dead and the patient has an ART pick up date after the date of death or death notification
EC3	O estado vital do paciente é Óbito e o paciente tem uma data de levantamento de ARV’s depois da data de Óbito ou da notificação do óbito.

The system will identify all the patients marked as dead in TARV Program Enrollment as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*
- o *Patient\_State.state = 10 = DIED*
- o *Patient\_state.end\_date is null (as last state)*

and have any drugs pick up after the date of death as following:

- o *Encounter ID = 18*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =10)*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date,

Date of Death in Demographics, ART Pick up Consultation date (FILA), ART Pick up Consultation Registration date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC4 The patient's vital status is dead and the patient has a clinical consultation after date of death or death notification**

EC4	The patient's vital status is dead and the patient has a clinical consultation after date of death or death notification
EC4	<i>O estado vital do Paciente é Óbito e o paciente tem uma consulta clinica depois da data de óbito ou notificação de óbito</i>

The system will identify all the patients marked as dead as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*
- o *Patient\_State.state = 10 = DIED*
- o *Patient\_state.end\_date is nul (as last state)*

and have any clinical consultation after the date of death as following:

- o *Encounter ID = (6 or 9)*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =10)*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date, Date of Death in Demographics, Clinical Consultation Date, Clinical Consultation Registration date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC5 The patient's vital status is dead and the patient has a laboratory result (specimen collection date or report date) after the date of death or death notification**

EC5	The patient's vital status is dead and the patient has a laboratory result (specimen collection date or report date) after the date of death or death notification
EC5	<i>O estado vital do paciente é óbito e o paciente tem resultado de laboratório (a data de colheita da amostra ou data do resultado) depois da data de óbito ou notificação do óbito.</i>

The system will identify all the patients marked as dead as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*

- o *Patient\_State.state = 10 = DIED*
- o *Patient\_state.end\_date is nul (as last state)*

and have any laboratory result after the date of death as following:

- o *Encounter IDs = Laboratory Form = 13*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =10)*

OR

- o *Encounter IDs = ( Adult Follow up = 6 or Pediatric Follow up = 9 or MasterCard=?)*
- o *Any specimen collection date, any test result date recorded in the encounter*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =10)*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date, Date of Death in Demographics, Laboratory Form Date, Laboratory Form Entry Date, Clinical Consultation Date, Clinical Consultation Entry Date, Mastercard Date, MasterCard Entry Date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC6 The patient has been identified as transferred out but has an ART pick up date after the transfer out date**

EC6	The patient has been identified as transferred out but has an ART pick up date after the transfer out date
EC6	O paciente foi identificado como transferido para mas tem uma data de levantamento de ARV's depois da data de transferência para.

The system will identify all the patients marked as transferred-out as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*
- o *Patient\_State.state = 7 = Transferred out to another health facility*
- o *Patient\_state.end\_date is null*

and have any drugs pick up after the date of transferred out as following:

- o *Encounter ID = 18*

- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =7)*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date, ART Pick up Consultation date (FILA), ART Pick up Consultation Registration date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC7 The patient has been identified as transferred out but has a clinical consultation date after the transfer out date**

EC7	The patient has been identified as transferred out but has an clinical consultation date after the transfer out date
EC7	O paciente foi identificado como transferido para mas tem uma data de consulta clinica depois da data de transferência para.

The system will identify all the patients marked as transferred-out as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*
- o *Patient\_State.state = 7 = Transferred out to another health facility*
- o *Patient\_state.end\_date is null*

and have any clinical consultation after the date of transferred out as following:

- o *Encounter ID = (6 or 9)*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =7)*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date, Clinical Consultation Date, Clinical Consultation Registration date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC8 The patient has been identified as transferred out but has an laboratory results (specimen collection date or report date) after the transfer out date**

EC8	The patient has been identified as transferred out but has an laboratory results (specimen collection date or report date) after the transfer out date
EC8	O paciente foi identificado como transferido para mas tem resultados de laboratório (data de colheita da amostra ou data do relatório) depois da data de transferência para

The system will identify all the patients marked as transferred-out as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*
- o *Patient\_State.state = 7 = Transferred out to another health facility*
- o *Patient\_state.end\_date is null*

and have any laboratory result after the date of transferred out as following:

- o *Encounter IDs = ( Adult Follow up = 6 or Pediatric Follow up = 9 or MasterCard=?)*
- o *Any specimen collection date, any test result date recorded in the encounter*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =7)*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date, Laboratory Form Date, Laboratory Form Entry Date, Clinical Consultation Date, Clinical Consultation Entry Date, Mastercard Date, MasterCard Entry Date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC9 The patient has been identified as abandoned but has an ART pick up date after the abandoned date**

EC9	The patient has been identified as abandoned but has an ART pick up date after the abandoned date
EC9	O paciente foi identificado como abandono mas tem uma data de levantamento de ARVs depois da data de abandono

The system will identify all the patients marked as abandoned as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*
- o *Patient\_State.state = 9 = Abandoned the treatment*
- o *Patient\_state.end\_date is null*

and have any drugs pick up after the date of abandoned as following:

- o *Encounter ID = 18*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =9)*



The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date, ART Pick up Consultation date (FILA), ART Pick up Consultation Registration date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC10 The patient has been identified as abandoned but has a clinical consultation date after the abandoned date**

EC10	The patient has been identified as abandoned but has an clinical consultation date after the abandoned date
EC10	O paciente foi identificado como abandono mas tem uma data de consulta clinica depois da data de abandono

The system will identify all the patients marked as abandoned as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*
- o *Patient\_State.state = 9 = Abandoned the treatment*
- o *Patient\_state.end\_date is null*

and have any clinical consultation after the date of abandoned as following:

- o *Encounter ID = (6 or 9)*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =9 )*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date, Clinical Consultation Date, Clinical Consultation Registration date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC11 The patient has been identified as abandoned but has an laboratory results(specimen collection date or report date) after the transfer out date**

EC11	The patient has been identified as abandoned but has an laboratory results(specimen collection date or report date) after the abandoned date	#
EC11	O paciente foi identificado como abandono mas tem resultados de laboratório (data de recolha da amostra ou data de relatório) depois da data de abandono	

The system will identify all the patients marked as abandoned as following:

- o *Patient\_program.program\_id =2 = SERVICO TARV-TRATAMENTO*
- o *Patient\_State.state = 9 = Abandoned the treatment*
- o *Patient\_state.end\_date is null*

and have any laboratory result after the date of death as following:

- o *Encounter IDs = ( Adult Follow up = 6 or Pediatric Follow up = 9 or MasterCard=?)*
- o *Any specimen collection date, any test result date recorded in the encounter*
- o *Encounter Date >= patient\_state.start\_date (where patient\_state.state =9)*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, Patient Enrollment Date, Patient Last State, Last State Date, Laboratory Form Date, Laboratory Form Entry Date, Clinical Consultation Date, Clinical Consultation Entry Date, Mastercard Date, MasterCard Entry Date, First Entry Date (the date the patient information was first entered into EPTS), Last Update (the date the patient information was last updated in EPTS).

**#FR\_EC12 The patient's date of birth, estimated date of birth or entered age indicate the patient was born before 1920**

EC12	The patient's date of birth, estimated date of birth or entered age indicate the patient was born before 1920	#
EC12	<i>A data de nascimento do paciente, a data estimada de nascimento ou a idade indicam que o paciente nasceu antes de 1920</i>	

The system will identify all patients with birthdate (*patient.birthdate< '01-JAN-1920*)

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), ART Program Enrollment Date, ART Program Enrollment Status

**#FR\_EC13 The patients date of birth, estimated date of birth or age is negative**

EC13	The patients date of birth, estimated date of birth or age is negative or without birthdate	#
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EC13	<i>A data de nascimento do paciente, a data estimada de nascimento ou a idade é negativa e pacientes sem a data de nascimento</i>	
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The system will identify all patients with *age<0 and patient.birthdate is null*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), ART Program Enrollment Date, ART Program Enrollment Status

#### **#FR\_EC14 The patients date of birth, estimated date of birth or age is negative**

EC14	The patients birth, estimated date of birth or age indicates they are > 100 years of age	#
EC14	<i>A data de nascimento do paciente, a data estimada de nascimento ou a idade indicam que a idade é &gt; que 100 anos</i>	

The system will identify all patients with *age >100*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), ART Program Enrollment Date, ART Program Enrollment Status

#### **#FR\_EC15 The patient's date of birth is after any drug pick up date**

EC15	The patient's date of birth is after any drug pick up date	#
EC15	<i>A data de nascimento do paciente é depois de um levantamento de ARVs.</i>	

The system will identify all patients whose date of birth is after any drug pick up:

*o Encounter ID = 18*

*o Encounter Date < patient\_birthdate*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), 1<sup>st</sup> Drugs Pick Up after the Birthdate, ART Program Enrollment Date, ART Program Enrollment Status

### #FR\_EC16 The patient's date of birth is after any clinical consultation date

EC16	The patients date of birth is after any clinical consultation date	#
EC16	A data de nascimento do paciente é depois de uma consulta clínica.	

The system will identify all patients whose date of birth is after any clinical consultation:

*o Encounter ID = 6,9*

*o Encounter Date < patient\_birthdate*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), 1<sup>st</sup> Consultation After the Birthdate, ART Program Enrollment Date, ART Program Enrollment Status

### #FR\_EC17 The date of drug pick up is before 1985

EC17	The date of drug pick up is before 1985	#
EC17	A data de levantamento dos medicamentos é antes de 1985	

The system will identify all patients who have any drugs pick up before 1985 as following:

*o Encounter ID = (18)*

*o Encounter Date <= '01-JAN-1985'*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), Last Drugs Pick Up Before 1985, ART Program Enrollment Date, ART Program Enrollment Status

### #FR\_EC18 The date of clinical consultation is before 1985

EC18	The date of clinical consultation is before 1985	#
EC18	A data da consulta clinica é antes de 1985	

The system will identify all patients who have any consultation before 1985 as following:

- o *Encounter ID = (6 or 9)*
- o *Encounter Date <= '01-JAN-1985'*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), Last Clinical Appointment before 1985, ART Program Enrollment Date, ART Program Enrollment Status

**#FR\_EC19 The date of laboratory test specimen collection date or results report date is before 1985**

EC19	The date of laboratory test specimen collection date or results report date is before 1985	#
EC19	A data de teste de laboratório (recolha de amostra ou resultado) é anterior a 1985	

The system will identify all patients who have any consultation before 1985 as following:

- o *Encounter ID = (13)*
- o *Encounter Date <= '01-JAN-1985'*

OR

- o *Encounter ID = (6 or 9)*
- o *Encounter Date <= '01-JAN-1985'*
- o *OBS Recorded with any values:*
  - 1- *CD4 (/mm) Concept ID 1695,*
  - 2- *CD4 (%) Concept ID 730,*
  - 3- *Carga Viral Concept ID 856,*
  - 4- *G. Brancos Concept ID 678,*
  - 5- *Neutrofilos (/mm) Concept ID 1690,*
  - 6- *Neutrofilos (%) Concept ID 1022,*
  - 7- *Linfocitos (/mm) Concept ID 1691,*
  - 8- *Linfocitos (%) Concept ID 1021,*
  - 9- *Hemoglobina Concept ID 1692,*
  - 10- *Provas Hepaticas -ALT Concept ID 1694,*
  - 11- *Provas Hepaticas -AST Concept ID 1693,*
  - 12- *Glicemia Concept ID 887,*
  - 13- *Ureia Concept ID 857,*

- 14-Creatina Concept ID 1011,
- 15-Amilase Concept ID 1299,
- 16-Teste de Gravidez Concept ID 45,
- 17-Plaquetas Concept ID 729,
- 18-RPR Concept ID 1655

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), Last Appointment with Lab Result before 1985, ART Program Enrollment Date, ART Program Enrollment Status

**#FR\_EC20 Patients that are not enrolled in TARV but has a consultation or drugs pick up recorded in the system**

EC20	Patients that are not enrolled in TARV but has a consultation or drugs pick up recorded in the system	#
EC20	Pacientes que não estão inscritos no programa TARV mas têm uma consulta ou levantamento de ARVs registrados no sistema.	

The system will identify all patients who have any consultation before 1985 as following:

- o *Encounter ID = (6 or 9 or 18)*
  - o *Encounter Date = any*
- AND
- o *No ART Program (Id=2) Enrollment*

The system should show the following details:

Health Facility Name, Patient Id, Patient NID, Patient Name, Patient Date of Birth\*, Patient Sex, First Entry Date (the date the patient information was first entered into EPTS), Last update (the date the patient information was last updated in EPTS), 1<sup>st</sup> Clinical Consultation Date, 1<sup>st</sup> Drugs Pick Up Date

## 5 Annexures