

RHEA Project

Use Case Specification: Maintain Client Registry

GID: 00002

UC: 01.002

Version: 0.1

Revision History

Date	Version	Description	Author(s)
16/07/2011	0.1	Initial creation	Antoine, Ryan

Description

This use case described how the user is able to maintain the client registry by searching for clients, adding new clients, updating existing clients and removing client records.

Actors

The Administrator of the Client Registry

Pre-condition

- **User Permission:** The user must be authenticated to the system and must have proper permissions to maintain the client registry.

Post-condition

- **The Client:** The client must be found, inserted, altered or removed from/in the database.

Special Requirements

- For people over 16 that have a NID number, then this number will be used to uniquely identify them.
- For people under 16 that have a Application number, then this number will be used to uniquely identify them.
- For people with neither a NID or an Application Number, a unique temporary number will be generated and used to uniquely identify the client until it is replaced with either a NID or an Application number.
- Temporary application numbers can be issued only at the central level by the client registry.
- Client, father and mother names should be stored in a phonetic form as well as the original text to allow for phonetic searches when querying the client registry.
- An unnamed (newborn) baby is to be registered using the mother's given name in conjunction with the prefix "Baby of".

Primary Scenario

Adding a new Client to the registry

The client registry administrator fills in required data on the client registration form and submits to the system. The system performs the necessary validations and stores the new client information into the registry.

1. The client registry administrator opens the client registration form.
2. The client registry administrator fills in the new client data.
3. The system verifies if the data have been entered properly and performs necessary validations. The system can generate a temporary client ID(Temporary Application number).
5. The system stores the new client data.
6. The system temporary client ID or the newborn civil registration form can be printed.
5. The system returns to the previous screen.

Secondary Scenarios

Searching for a Client in the Client Registry

The client registry administrator searches for a client by specifying some criteria.

1. The client registry administrator inputs the search criteria.
2. The system searches through the client registry.
3. The system displays a list of search results.
4. The user can select one of the clients among the search results for visualizing, editing or deactivation.

Editing a Client in the Client Registry

The client registry administrator searches for the client to be edited and edits the client data.

1. The client registry administrator selects the client to be edited.
2. The client registry administrator edits the client data and submit to the system.
3. The system performs the necessary validations.
4. The system updates the client data into the registry.
5. The system returns to the previous screen.

Deactivating a Client in the Client Registry

The client registry administrator can deactivate the client only if the client does not have any records associated with him/her in the system.

1. The client registry administrator searches for the client to be deactivated.
2. The system requires the confirmation of the client deactivation.
3. The client registry administrator confirms the deactivation of the client.
4. The system verifies whether there is no other records associated with the client.

5. The system deactivates the client.
6. The system returns to the previous screen.

Draft Screens

Demographics Data

Address

Documents

Merge this in the document section?

Should names be a repeating structure?

Identifiers

Identification Numbers

Identifier Type

Identification number

Insert

Delete

Names

Last Name

Other Names

Preferred Name

Conditional Use of the Name

Name Usage

Name Usage Start Date

Name Usage End Date

Other Demographics Data

Father Name

Mother Name

Date of Birth

DoB Accuracy

Estimated Age

Marital Status

Gender

Country of Birth

District of Birth

Demographics Data

Address

Documents

Address

Country

ComboBox

Province code

ComboBox

District code

ComboBox

Sector code

ComboBox

Cell code

ComboBox

Village code

ComboBox

P.O. Box

Some text

Email

Some text

Street Number

Some text

Street Name

Some text

Complement

Some text

Latitude

Some text

Longitude

Some text

Should address be a repeating structure? To allow for the recording of multiple addresses?

Demographics Data

Address

Documents

Group Name

Identification Nuber	Identifier Type	Identification Issuer
Some text	ComboBox	ComboBox
Some text	ComboBox	ComboBox

Insert

Delete

Table Structure

Element	Description	Length/Type	Status(R = Required, O = Optional)	Behavior	Map To Existing Field or New
IDENTIFICATION DATA STRUCTURE					
PERSON_ID	ID provided by the database	LONG	R	This is the unique number provided by the database	Maps to primary key
NID_NUMBER	NID	STRING(15)	O	This is the national unique identifier as provided by the NID	NEW
APPLICATION_NUMBER	Application number as provided by the NID	STRING(15)	O	This is the application number as provided by the NID for those less than 16	NEW

TEMPORARY_APPLICATION_NUMBER	Temporary application number provided by the SHR	STRING(15)	O	This number is provided for those new registers that do not have application number or NID	NEW
RAPID_SMS_NUMBER	Temporary number provided by RapidSMS	STRING(30)	O	This is the temporary number Rapid SMS has for those who do not have an ID	NEW
IDENTIFICATION DOCUMENTS					
IDENTIFIER_NUMBER	Indicates the identifier number	STRING(30)	R		Maps to DOCUMENT_NUMBER in Document structure
IDENTIFIER_TYPE	Indicates the type of the identifier	STRING(2)	R	1 = local ID provided at each HC facility 2 = Public Health Insurance 3 = Private Health Insurance 4= SS 5 = ... (can you add here Richard? I think we should have the possibility to store all the documents Rwanda uses.. PID-3.5 – Identifier Type Code in the annex has to be adapted to be used here.	Maps to DOCUMENT_TYPE_FK in Docuemnt Structure
IDENTIFIER_ISSUE	The	STRING(2)	R	1 = HC facility	Maps to

R	organization, agency or provider that allocates a subject of care identifier			2 = Mutual 3 = Rama 4=	GENERIC_FIELD in document structure
POC_MEDICAL_RECORD_NUMBER	Number of medical record at the point of care	STRING(10)	O	Stores the local medical record number of the person	NEW
NAME DATA STRUCTURE					
LAST_NAME	The last name of the client	STRING(30)	R		NEW
OTHER_NAMES	Other names of the client	STRING(50)	R		Maps to GIVEN_NAME
PREFERRED_NAME	Indicates the name by which the subject chooses to be identified.	Boolean	R	True / False	NEW
NAME_CONDITIONAL_USE	An indicator of specific conditions or rules that should be applied to a subject of care name.	STRING(1)	R	Source: HL7 V2.4 (PV-16 VIP indicator, Table 0099 VIP indicator code). Where: 1 Unreliable information 2 Known misspelling 3 Name not to be used 4 Name linkage forbidden by law 6 Special privacy/security requirement. 9 Temporary name	NEW

NAME_USAGE	A classification that enables differentiation between the usage of names for a subject of care. An individual name may have many name uses.	STRING(1)	R for newborns	Source: HL7 V2.4 (PID-5 Person name, Table 0200 Person Name Usage code). Where: R Reporting N Newborn name B Professional or business name M Maiden name (name at birth) (original name) L Registered name (legal name) O Other name (alias)	NEW
NAME_USAGE_START_DATE	The date at which this name usage for the name to which the usage is associated starts.	DATE	R	These two dates are very important since persons can change name and the only way to preserve the information from the previous encounters with a different name is to have the names and periods of time where this name was valid.	NEW
NAME_USAGE_END_DATE	The date at which this name usage for the name to which the usage is associated ceased to be used.	DATE	R		NEW
OTHER DEMOGRAPHIC					

DATA					
FATHER_NAME	Full name of the father	STRING(80)	R		Maps to FATHER_NAME
MOTHER_NAME	Full name of the mother	STRING(80)	R		Maps to MOTHER_NAME
DATE_OF_BIRTH	Date of birth	DATE	R	Should allow for partial dates (only year, year and month)	Maps to BIRTH_DAY
DATE_OF_BIRTH_ACCURACY_INDICATOR	Estimates the accuracy of the Date of Birth.	AAA - (Exact Date) EEE (Estimated Date) UUU – (Unknown date) EAA – (Accurate day and month, estimated year) AAU – (Unknown day, accurate month and year) UUE – (Unknown day and month, estimated year) UUA- Unknown day and month, accurate	O	If month or days are missing, the client registry system should automatically calculate the accuracy indicator. POC systems should also present this functionality or ask for the accuracy indicator every time a data is entered.	Maps to BIRTH_DATE_ACURR_INDICATOR_FK

		year			
ESTIMATED_AGE	Estimated age of the client	INTEGER	R	Automatically calculated by the system and should use the UK patient-banner display standard that will be adopted in Rwanda, as below	Maps to ESTIMATE_D_AGE
TEMPORAL_UNITS_FOR_ESTIMATED_AGE	Temporal units for estimated age (from the patient-banner standard)	STRING(1)	R	1= "> 2 hours display min => 120m " 2 = "> 2 days display hours => 30h 3= "> 4 weeks display days => 28d 4 = "> 1 year display weeks and days => 7w 2d" 5="> 2 years display month and days => 6m 7d 6= "> 18 years display year and month => 17y 6m 7 = ">= 18 years display years => 18y"	Maps to TEMPORAL_UNIT_FK
MARITAL_STATUS	Marital status	STRING(1)	R	1= single 2 =married 3 = widow/widower 4 = divorced 5 = cohabitation	Maps to MARITAL_STATE_FK
GENDER	Gender	STRING(1)	R	1= male 2= female 3=undetermined	Maps to SEX_FK

				4=not known	
COUNTRY_PLACE_OF_BIRTH_CODE	Informs the country code where the client was born.	STRING(2)	R	ISO country codes	Maps to BIRTH_COUNTY_FK
DISTRICT_PLACE_OF_BIRTH_CODE	Informs the district where the client was born.	STRING	R	Codes will be generated from the Rwanda list	Maps to BIRTH_TOWN_FK
PASSPORT_NUMBER	Passport number in case of foreigners	STRING(10)	O	If foreigner the passport number is mandatory	Maps to DOCUMENT structure
COUNTRY_CODE_OF_ISSUANCE	Country that issued the passport	STRING(2)	O	If foreigner, field is required. (ISO country codes)	Maps to DOCUMENT structure
DATE_PASSPORT_ISSUED	Date passport was issued	DATE	O	If foreigner, field is required	Maps to DOCUMENT structure
PASSPORT_EXPIRATION_DATE	Date passport expires	DATE	O	If foreigner, field is required	Maps to DOCUMENT structure

ADDRESS DATA STRUCTURE					
PROVINCE_CODE	Province where the client lives	STRING	R	01 = Kigali 02 = North 03 = East 04= South 05 = West	NEW
DISTRICT_CODE	District where the client lives	STRING	R	On the data entry screen, only the district names from the respective province should appear for	NEW

				selection.	
SECTOR_CODE	Sector where the client lives	STRING	R	On the data entry screen, only the sector names from the respective province/district should appear for selection.	NEW
CELL_CODE	Cell where the client lives	STRING	R	On the data entry screen, only the cell names from the respective province/district/sector should appear for selection.	NEW
VILLAGE_CODE	Village where the client lives	STRING	R	On the data entry screen, only the village names from the respective province/district/sector/cells should appear for selection.	NEW
POST_OFFICE_BOX	Post Office Box of the client address	STRING	O	R for health care facilities	Post Office Box
CELLULAR_TELEPHONE	Client cellphone	STRING(12)	O		Cellular telephone
BUSINESS_TELEPHONE	Client business telephone	STRING(12)	O		Business telephone
EMAIL	Email address of the client	STRING(30)	O		Email
STREET_NUMBER	The street number where the client lives	STRING	O		STREET_NUMBER
STREET_NAME	Street name where the client	STRING(150)	O	Street name	Street Name

	lives				
COMPLEMENT	Complement of the street number like apt number	STRING(100)	O	Complement	Complement
POSTAL_CODE	Postal code of the address where the client lives		O		
COUNTRY_CODE	Country where the client lives	STRING(2)	O	Use ISO 3166 Country codes	Country
LATITUDE	(degrees, minutes..)	STRING(10)	O		NEW
LONGITUDE	(degrees, minutes..)	STRING(10)	O		NEW

Unused ez-HIS fields that are not in RHEA Requirements

- Registration Date
- Physical Characteristics
- Observations
- Ethnic Group
- Education Level
- Attending School
- Religion
- Blood type
- Rh Blood Type
- Family Situation
- SURROGATE
- Street Type
- Residential Quarter
- Telephone
- Fax
- CONTACT PATIENT ADDRESS
- National Health Card
- Tax ID Number

- Document Generic Fields