

## Facility Registry Conceptual Model

The facility registry is designed to list all the healthcare facilities within the country, and to provide relevant information about the facility.

It is used as an anchor for reporting - to ensure a consistent list of facilities across different systems that track healthcare activity.

It is used as a reference for tracking services provided to patients, e.g., prenatal visits, in order to support the integrity of the data stored within the Shared Health Record.

As the Rwandan health system develops, it is expected the registry will be used to support patient referrals - by recording the locations of resources and service provisions. It will also - through its information on resource location - be used to support scheduling of patient activities.

The facility registry is also expected to provide reference data to support supply management and logistics.

This conceptual model is purposely general in order to lay the foundation for this range of uses. The reader should note the presence of several coded data elements, e.g., resource type code, status code. The set of valid values needs to be provided as part of completion of the model.

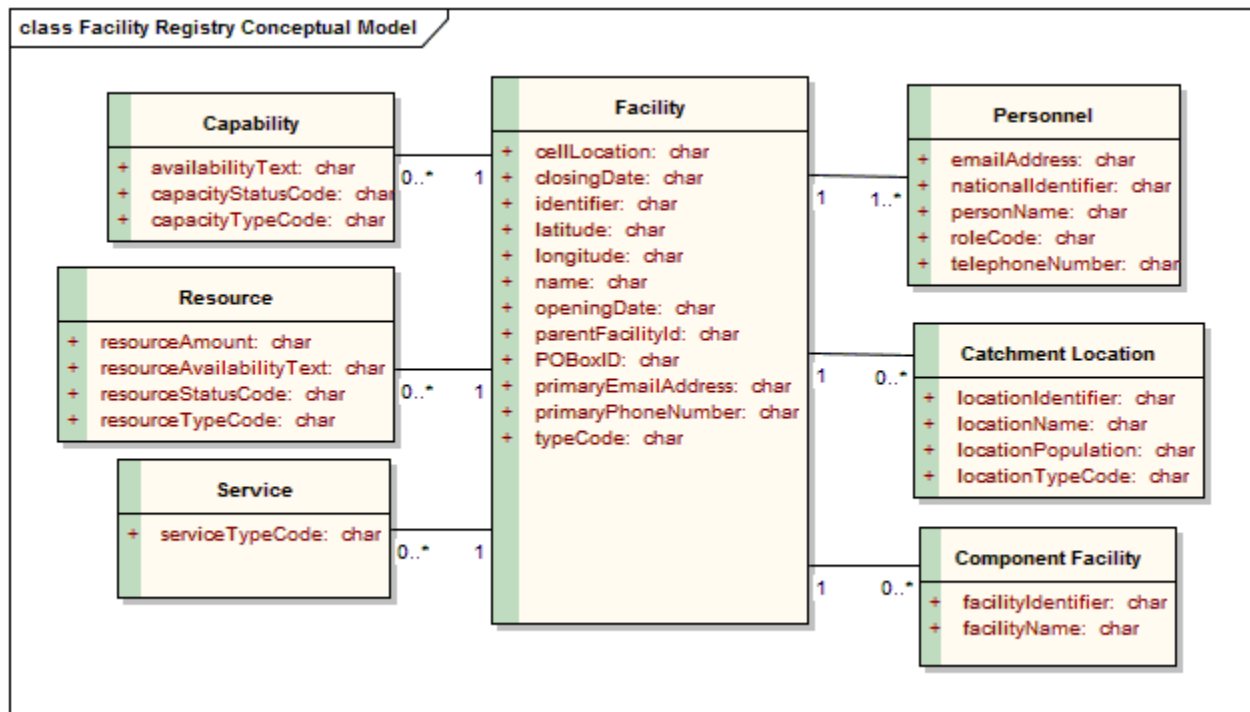


Figure 1 : Facility Registry Conceptual Model

Here is a question to consider, and some initial comments:

- The notions of capability, resource, and service can easily overlap. Should the classes be merged?
- Also, change “identifier” to “facility identifier”
- Add village location, district location, province location.
- Should there be multiple phone numbers?

- Should there be multiple addresses?

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## Facility Registry Conceptual Model::Capability

### *public Class:*

Information about a capability, e.g., access to water, electric power, Internet access, that is necessary for the full provision of services at the facility.

Note, the model distinguishes between capabilities - something that is used generally to support the work of the facility, and resources - a particular equipment item or feature which is used to provide specific services.

### *Facility Registry Conceptual Model::Capability Attributes*

Attribute	Type	Notes
capacityStatusCode	public : <i>char</i>	Information regarding the status of the capacity at the location. E.g., active, not present, temporarily unavailable.
capacityTypeCode	public : <i>char</i>	Defines the type of capacity that is being asserted for the facility.
availabilityText	public : <i>char</i>	A text block that provides qualitative information about the level of availability of an active capacity. Question: Is it possible to define a useful scoring system or set of codes to indicate capacity availability?

## Facility Registry Conceptual Model::Catchment Location

### *public Class:*

Information about a location whose population is within the catchment area for the facility. In principal, this information could be replaced with a reference to a "location registry".

### *Facility Registry Conceptual Model::Catchment Location Attributes*

Attribute	Type	Notes
locationIdentifier	public : <i>char</i>	The nationally used identifier for the location.
locationName	public : <i>char</i>	The name used to refer to the location.
locationTypeCode	public : <i>char</i>	The type of location, e.g., village, sector, that is a component of the facility's catchment area.
locationPopulation	public : <i>char</i>	The human population of the location.

## Facility Registry Conceptual Model::Component Facility

### *public Class:*

Identification of a facility located within this facility. The structure is intended to be used for such purposes as identifying individual clinics or ancillary services within a health center or hospital.

### *Facility Registry Conceptual Model::Component Facility Attributes*

Attribute	Type	Notes
facilityName	public : <i>char</i>	The name of the facility.
facilityIdentifier	public : <i>char</i>	The nationally assigned identifier for the facility.

## Facility Registry Conceptual Model::Facility

### *public Class:*

An institution, cited at a definite location, that carries on activities or provides services that are included within the provision of healthcare within Rwanda.

### *Facility Registry Conceptual Model::Facility Attributes*

Attribute	Type	Notes
cellLocation	public : char	The identifier for the cell in which the facility is located. Given knowledge of the cell, province, district, and sector location can be derived. Question: Is village location needed? Question: Where (in the RHEA registry configuration) is the geographic hierarchy of the country to be managed?
closingDate	public : char	The date on which a facility closed, or is expected to close.
identifier	public : char	The identifier assigned to the facility.
latitude	public : char	The latitude of a location on the Earth is the angular distance of that location south or north of the Equator. The latitude is an angle, and is usually measured in degrees (marked with °).
longitude	public : char	A geographic coordinate that specifies the east-west position of a point on the Earth's surface. It is an angular measurement, usually expressed in degrees, minutes and seconds
name	public : char	The name of the facility.
openingDate	public : char	The date on which a facility opened, or is scheduled to open. If the date provided is earlier than the current date, then the facility is considered to have opened.
parentFacilityId	public : char	The identifier of the facility that is considered to be the parent of this one. The parent id is valued for facilities, such as ancillary departments, that are contained within other facilities.
POBoxID	public : char	The identifier of a post office box to which mail for the facility is directed.
primaryPhoneNumber	public : char	The phone number that is to be used when calling the facility in cases where the specific number of a person or department is not known.
typeCode	public : char	The type assigned to this facility.
primaryEmailAddress	public : char	The email address that is to be used when sending messages to the facility in cases where the specific address for a person or department is not known.

## Facility Registry Conceptual Model::Personnel

### *public Class:*

Information about a person who plays a role in supporting the functioning of the healthcare facility. Currently the only such role that is captured is that of the facility director. Information for this role must be captured.

Note, this data structure may be replaced by a reference to an entry within the Provider Registry.

### *Facility Registry Conceptual Model::Personnel Attributes*

Attribute	Type	Notes
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emailAddress	public : <i>char</i>	The address used to route email messages to the person.
personName	public : <i>char</i>	The name of the person.
nationalIdentifier	public : <i>char</i>	The national identifier assigned to the person.
roleCode	public : <i>char</i>	The role played by the person within the facility. E.g., director.
telephoneNumber	public : <i>char</i>	The telephone number used to direct phone calls to the person.

## Facility Registry Conceptual Model::Resource

### *public Class:*

Information about a resource housed at the facility that is used to provide services. A resource may be scheduled, and it may be the subject of referrals, e.g., an Xray machine.

### *Facility Registry Conceptual Model::Resource Attributes*

Attribute	Type	Notes
resourceAmount	public : <i>char</i>	A measure of the amount of resource available, e.g, number of ambulances.
resourceAvailabilityText	public : <i>char</i>	A text block that provides details regarding a resource's availability.
resourceStatusCode	public : <i>char</i>	Information about the availability of a resource, e.g, active, undergoing maintenance, inactive.
resourceTypeCode	public : <i>char</i>	A code that defines the type of resource whose availability is being recorded.

## Facility Registry Conceptual Model::Service

### *public Class:*

A particular service that is provided by the facility. For example, the District Health System Strengthening Survey lists lab tests performed by a facility.

### *Facility Registry Conceptual Model::Service Attributes*

Attribute	Type	Notes
serviceTypeCode	public : <i>char</i>	Identifies a particular service provided by the facility, e.g., performance of a lab test, provision of physical therapy.