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**Document Name:** Provider Documentation

**Document Version:** 1.0

**Revision Date:** 2/16/2017

**Provider Definition:**

Health professionals who provide health care services; such as doctors, hospitals, chiropractors, physical therapists, and others offering specialized health care services.

**Business rules for Provider:**

|  |  |  |
| --- | --- | --- |
| **Area** | **Number** | **Rule** |
| Provider\_id | ISO01 | Unique identifier for various healthcare sources |
| Provider\_type | ISO02 | The different healthcare sources |

**Definition of Tables:**

* **Provider:** Lists all providers, i.e. Doctors and Hospitals, and populate them with Provider\_id
* **Hospital:** Lists hospital names and id (Provider\_id)
* **Doctor:** Contains Doctor\_id (Provider\_id), first name, last name, specialization, address, phone and email.
* **Room:** It has Room\_id, type of room, cost of using the room, and Hospital\_id.
* **Bill:** Lists Bill\_number, amount due, date of billing, and due date for the bill.
* **Medicines:** Contains Medicine\_id, name, and price.
* **Prescription:** Contains Prescription\_id, quantity and Medicine\_id
* **Payment:** It has Payment\_id, method of payment, payment status, date of payment, and Bill\_number

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Provider** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Provider\_id | varchar(10) | Not Null | Y | N |
| Provider\_type | varchar(10) | Not Null | N | N |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Hospital** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Hospital\_id | varchar(10) | Not Null | Y | Y |
| Hospital\_name | varchar(25) | Not Null | N | N |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Doctor** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Doctor\_id | varchar(10) | Not Null | Y | Y |
| Doctor\_fname | varchar(15) | Not Null | N | N |
| Doctor\_lname | varchar(15) | Not Null | N | N |
| Doctor\_specialty | varchar(15) | Not Null | N | N |
| Doctor\_address | varchar(15) | Null | N | N |
| Doctor\_phone | varchar(10) | Not Null | N | N |
| Doctor\_email | varchar(20) | Null | N | N |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Room** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Room\_id | varchar(10) | Not Null | Y | N |
| Room\_type | varchar(20) | Not Null | N | N |
| Room\_cost | float | Not Null | N | N |
| Hospital\_id | varchar(10) | Not Null | N | Y |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bill** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Bill\_num | varchar(10) | Not Null | Y | N |
| Bill\_amount | double | Not Null | N | N |
| Bill\_date | Date | Not Null | N | N |
| Bill\_duedate | Date | Nut Null | N | N |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Medicines** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Medicines\_id | varchar(10) | Not Null | Y | N |
| Medicine\_name | varchar(30) | Not Null | N | N |
| Medicine\_price | double | Not Null | N | N |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Prescription** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Prescription\_id | varchar(10) | Not Null | Y | N |
| Prescription\_quantity | integer(10) | Not Null | N | N |
| Medicine\_id | varchar(10) | Not Null | N | N |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Payment** | | | | |
| **Attribute Name** | **Data type** | **Nullability** | **PK** | **FK** |
| Payment\_id | varchar(10) | Not Null | Y | N |
| Payment\_method | varchar(10) | Not Null | N | N |
| Payment\_status | varchar(10) | Not Null | N | N |
| Payment\_date | Date | Not Null | N | N |
| Bill\_number | varchar(10) | Not Null | N | Y |

|  |  |  |  |
| --- | --- | --- | --- |
| **RELATIONSHIPS** | | | |
| **From** | **To** | **Dependency** | **Foreign Key** |
| Provider | Hospital | 1-1 | Provider\_id |
| Doctor | Hospital | 1-1 | Hospital\_id |
| Hospital | Doctor | \*-\* | Doctor\_id |
| Provider | Doctor | 1-1 | Provider\_id |
| Doctor | Prescription | 1-\* | Doctor\_id |
| Prescription | Medicine | \*-\* | Prescription\_id |
| Medicine | Disease | \*-\* | Medicine\_id |

Please find the relationship understanding from the image below.