Relational Schema

Primary Key

Foreign Key

Facility

|  |  |
| --- | --- |
| Facility ID | Facility Name |

Care Center

|  |  |  |  |
| --- | --- | --- | --- |
| CareCenterID | NurseInCharge | Facility ID | Care Center Name |

Employee/CareCenter

|  |  |  |
| --- | --- | --- |
| CareCenterID | EmpNo | HoursWorked |

Employee

|  |  |  |
| --- | --- | --- |
| EmpNo | EmpFirstName | EmpLastName |

Room

|  |  |
| --- | --- |
| RoomNo | CareCenterID |

Physician

|  |  |  |
| --- | --- | --- |
| PhysicianID | PhysicianFirstName | PhysicianLastName |

PhysicianPatientAdmin/Refer

|  |  |  |
| --- | --- | --- |
| PhysicianID | MRN | Admitted/Referred |

Diagnosis

|  |  |
| --- | --- |
| DiagnosisCode | DiagnosisName |

Diagnostic Unit

|  |  |  |
| --- | --- | --- |
| UnitID | FacilityID | UnitName |

Treatment

|  |  |  |
| --- | --- | --- |
| TreatmentCode | UnitID | TreatmentName |

Ordered Treatment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TreatmentCode | OrderID | TreatmentDate | TreatmentTime | Results |

Vendor

|  |  |
| --- | --- |
| VendorID | VendorName |

ItemVendor

|  |  |
| --- | --- |
| VendorID | ItemNo |

Item

|  |  |  |
| --- | --- | --- |
| ItemNo | ItemDese | ItemUnitCost |

Patient

|  |  |  |  |
| --- | --- | --- | --- |
| MRN | PhysicianID | PatientFirstName | PatientLastName |

Bed

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| BedID | RoomID | MRN | BedNo | CareCenterID |  |

Assessment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| VisitID | MRN | EmpNo | VisitDate | VisitTime |
| VisitComments | VisitPatientWeight | VisitPatientBP | VisitPatientPulse | VisitPatientTemp |

PhysicianDX

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DxID | MRN | PhysicianID | DiagnosisDate | DiagnosisTime |

Order

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| OrderID | PhysicianID | MRN | TreatmentCode | ItemNo | OrderDate | OrderTime |

Item Consumption

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ConsumptionID | MRN | ItemNo | ConsumeDate | ConsumeTime | ConsumeQty | TotalCost |

Item Billing

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| BillingID | MRN | RoomNo | ItemNo | StartDate | EndDate | Cost |

Schedule

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ScheduleID | FacilityID | PhysicianID | SchedBegin | SchedEnd |

Data Dictionary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Facility |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| Facility ID | Interger | 15 | 1 | 15 | Facility ID | Administration |
| Facility Name | AlphaNumeric | 30 |  |  | The Name of the Facility | Administration |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Care Center |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| CareCenterID | Interger | 15 | 1 | 15 | Care center Id | Administration |
| NurseInCharge | AlphaNumeric | 50 | 1 | 50 | Name of Nurse in charge of that care center | HR |
| FacilityID | Interger | 15 | 1 | 15 | Facility ID | Administration |
| CareCenterName | AlphaNumeric | 50 |  |  | Name of Care Center | Administration |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Employee/CareCenter | |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| CareCenterID | Interger | 15 | 1 | 15 | Care center Id | Care Center |
| EmpNo | Interger | 15 | 1 | 15 | Employee ID | HR |
| HourWorked | Decimal | 5(5,2) |  |  | Hours the employee worked (i.e. 40.0 hours) | HR |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Employee |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| EmpNo | Interger | 15 | 1 | 15 | Employee ID | HR |
| EmpFirstName | AlphaNumeric | 50 |  |  | Employee’s First Name | HR |
| EmpLastName | AlphaNumeric | 50 |  |  | Employee’s Last Name | HR |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Room |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| RoomNo | Interger | 15 | 1 | 15 | Room ID | Administration |
| CareCenterID | Interger | 15 | 1 | 15 | Care center Id | Administration |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Physician |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| PhysicianID | Interger | 15 | 1 | 15 | Id of physician | Administration |
| PhysicianFirstName | AlphaNumeric | 50 |  |  | First Name of Physician | HR |
| PhysicianLastName | AlphaNumeric | 50 |  |  | Last name of Physician | HR |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Physician Patient Admin/Refer | | |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| PhysicianID | Interger | 15 | 1 | 15 | Id of physician | Administration |
| MRN | Interger | 15 | 1 | 15 | Id of patient | Administration |
| Admitted/Referred | AlphaNumeric | 1 | 1 | 1 | A for admitted or R for referred | Physician |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Diagnosis |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| DiagnosisCode | AlphaNumeric | 50 |  |  | The Code of the diagnosis | Physician |
| DiagnosisName | AlphaNumeric | 100 |  |  | The name of the diagnosis | Physician |

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| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Diagnostic Unit | |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| UnitID | Interger | 15 | 1 | 15 | Id of the unit | Administration |
| Facility ID | Interger | 15 | 1 | 15 | Facility ID | Administration |
| UnitName | AlphaNumeric | 50 |  |  | Name of Unit | Administration |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Treatment |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| TreatmentCode | Interger | 15 | 1 | 15 | Id of the treatment | Diagnostic Unit |
| UnitID | Interger | 15 | 1 | 15 | Id of the unit | Administration |
| TreatmentName | AlphaNumeric | 100 |  |  | Name of Treatment | Diagnostic Unit |

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| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Ordered Treatment | | |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| TreatmentCode | Interger | 15 | 1 | 15 | Id of the treatment | Diagnostic Unit |
| OrderID | Interger | 15 | 1 | 15 | Id of the order | Physician |
| TreatmentDate | AlphaNumeric | 8 | 8 | 8 | Date of treatment (i.e. day-month-year 08-10-2012) | Nurse |
| TreatmentTime | Decimal | 4 | 4 | 4 | Time in military standard (i.e. 17.15) | Nurse |
| Results | AlphaNumeric | 100 |  |  | Comments about the results from the treatment (i.e. adverse reactions, successfully treated, further treatment needed) | Physician and Nurse |

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| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Vendor |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| VendorID | Interger | 15 | 1 | 15 | Id of Vendor | Accounts Payable |
| VendorName | AlphaNumeric | 50 |  |  | Name of vendor | Accounts Payable |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | ItemVendor |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| VendorID | Interger | 15 | 1 | 15 | Id of Vendor | Accounts Payable |
| ItemNo | Interger | 15 | 1 | 15 | Id of Item | Accounts Payable |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Item |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| ItemNo | Interger | 15 | 1 | 15 | Id of Item | Accounts Payable |
| ItemDese | AlphaNumeric | 50 |  |  | Description of Item | Accounts Payable |
| ItemUnitCost | Decimal | 5(5,2) |  |  | Cost of item per unit (i.e. 23.45 for one unit ) | Accounts Payable |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Patient |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| MRN | Interger | 15 | 1 | 15 | Id of patient | Administration |
| PhysicianID | Interger | 15 | 1 | 15 | Id of physician | Administration |
| PatientFirstName | AlphaNumeric | 50 |  |  | First Name of Patient | Administration |
| PatientLastName | AlphaNumeric | 50 |  |  | Last Name of Patient | Administration |

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| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Bed |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| BedID | Interger | 15 | 1 | 15 | ID of Bed | Administration |
| RoomID | Interger | 15 | 1 | 15 | ID of Room | Administration |
| MRN | Interger | 15 | 1 | 15 | Id of patient | Administration |
| BedNo | Interger | 1 | 1 | 6 | Bed Number (position of Bed in room) | Administration |
| CareCenterID | Interger | 15 | 1 | 15 | Care center Id | Administration |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Assessement |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| VisitID | Interger | 15 | 1 | 15 | ID of visit | Administration |
| MRN | Interger | 15 | 1 | 15 | Id of patient | Administration |
| EmpNo | Interger | 15 | 1 | 15 | Employee ID | HR |
| VisitDate | AlphaNumeric | 8 | 8 | 8 | Date of visit (i.e. day-month-year 08-10-2012) | Nurse |
| VisitTime | Decimal | 4(2,2) | 4 | 4 | Time in military standard (i.e. 17.15) | Nurse |
| VisitComments | AlphaNumeric | 150 |  |  | Record reason for visit and symptoms | Physician |
| VisitPatientWeight | Decimal | 5(3,2) |  |  | Weight of patient in Kg. (i.e. 61.4 Kg) | Nurse |
| VisitPatientBP | Interger | 6 |  |  | Blood pressure of Patient (i.e. 120/80) | Nurse |
| VisitPatientPulse | Interger | 3 |  |  | Pulse rate of Patient (i.e. 74) | Nurse |
| VisitPatientTemp | Decimal | 5(3,2) |  |  | Temperature of patient in Celsius (i.e. 36.6) | Nurse |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | PhysicianDx |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| DxID | Interger | 15 | 1 | 15 | Id of diagnosis | Physician |
| MRN | Interger | 15 | 1 | 15 | Id of patient | Administration |
| PhysicianID | Interger | 15 | 1 | 15 | Id of physician | Administration |
| DiagnosisDate | AlphaNumeric | 8 | 8 | 8 | Date of diagnosis (i.e. day-month-year 08-10-2012) | Physician |
| DiagnosisTime | Decimal | 4(2,2) | 4 | 4 | Time in military standard (i.e. 17.15) | Physician |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Order |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| OrderID | Interger | 15 | 1 | 15 | Id of the order | Physician |
| PhysicianID | Interger | 15 | 1 | 15 | Id of physician | Administration |
| MRN | Interger | 15 | 1 | 15 | Id of patient | Administration |
| TreatmentCode | Interger | 15 | 1 | 15 | Id of the treatment | Diagnostic Unit |
| ItemNo | Interger | 15 | 1 | 15 | Id of Item | Accounts Payable |
| OrderDate | AlphaNumeric | 8 | 8 | 8 | Date of order(i.e. day-month-year 08-10-2012) | Physician |
| OrderTime | Decimal | 4(2,2) | 4 | 4 | Time in military standard (i.e. 17.15) | Physician |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | ItemConsumption |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| ConsumptionID | Interger | 15 | 1 | 15 | Id of Consumption | Nurse |
| MRN | Interger | 15 | 1 | 15 | Id of patient | Administration |
| ItemNo | Interger | 15 | 1 | 15 | Id of Item | Accounts Payable |
| ConsumeDate | AlphaNumeric | 8 | 8 | 8 | Date of consumption(i.e. day-month-year 08-10-2012) | Nurse |
| ConsumeTime | Decimal | 4(2,2) | 4 | 4 | Time in military standard (i.e. 17.15) | Nurse |
| ConsumeQty | Interger | 15 | 1 | 15 | Amount Consumed | Nurse |
| TotalCost | Decimal | 5(3,2) |  |  | ConsumeQty \* ItemUnitCost | Accounts Payable |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Item Billing |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| BillingID | Interger | 15 | 1 | 15 | ID of Billing | Accounts Receivable |
| MRN | Interger | 15 | 1 | 15 | Id of patient | Administration |
| RoomNo | Interger | 15 | 1 | 15 | Room ID | Administration |
| ItemNo | Interger | 15 | 1 | 15 | Id of Item | Accounts Payable |
| StartDate | AlphaNumeric | 8 | 8 | 8 | Start date of billing(i.e. day-month-year 08-10-2012) | Accounts Receivable |
| EndDate | AlphaNumeric | 8 | 8 | 8 | End date of billing(i.e. day-month-year 08-10-2012) | Accounts Receivable |
| Cost | Decimal | 7(5,2) |  |  | Total cost of the bill | Accounts Receivable |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Data Item: | Schedule |  |  |  |  |  |
| Name | Type | Length | Min | Max | Description | Source |
| ScheduleID | Interger | 15 | 1 | 15 | Id of schedule | HR |
| Facility ID | Interger | 15 | 1 | 15 | Facility ID | Administration |
| PhysicianID | Interger | 15 | 1 | 15 | Id of physician | Administration |
| SchedBegin | AlphaNumeric | 8 | 8 | 8 | Start date of the Schedule (i.e. day-month-year 08-10-2012) | HR |
| SchedEnd | AlphaNumeric | 8 | 8 | 8 | End date of the Schedule (i.e. day-month-year 08-10-2012) | HR |