### Table: medicalSpecialtiesNurse

| Column Name         | Description                           | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|---------------------|---------------------------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| specialtiesNurseID  | PK for medicalSpecialties             | int       |      | Y        |        |         |      |       |             | Y     |
| medspecialtiesNurse | list of medical specialties for nurse | nvarchar  | 50   |          |        |         |      |       |             | Y     |

#### Table: specialtiesNurse

| Column Name        | Description                        | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|--------------------|------------------------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| specialtiesNurseID | CPK; FK of medicalSpecialtiesNurse | int       |      |          |        |         |      |       |             | Y     |
| nurseID            | CPK; FK of nurse                   | int       |      |          |        |         |      |       |             | Y     |

# Table: nurse

| Column Name | Description   | Data Type | Size | Identity | Unique | Default | Rule       | Check                                   | Allow Nulls | Index |
|-------------|---|-----------|------|----------|--------|---------|------------|---|-------------|-------|
| nurseID     | PK for Nurse; unique ID for nurses                  | int       |      | Y        |        |         |            |   |             | Y     |
| firstName   | First name of the nurse                             | nvarchar  | 30   |          |        |         |            |   |             |       |
| lastName    | Last name of the nurse                              | nvarchar  | 30   |          |        |         |            |   |             |       |
| phoneNum    | Phone Number of the Nurse                           | char      | 14   |          |        |         | phone rule |   |             |       |
| street      | Street name of nurse                                | nvarchar  | 50   |          |        |         |            |   |             |       |
| city        | City of the nurse                                   | nvarchar  | 25   |          |        |         |            |   |             |       |
| state       | State of the nurse                                  | nvarchar  | 2    |          |        |         |            | LIKE '[A-Z] [A-Z]'                      |             |       |
| zip         | Zip code of the nurse                               | char      | 5    |          |        |         |            | LIKE '[0-9] [0-9]<br>[0-9] [0-9] [0-9]' |             |       |
| altPhone    | Alternative phone of the nurse                      | char      | 14   |          |        |         | phone rule |   |             |       |
| email       | Email of the Nurse                                  | nvarchar  | 50   |          |        |         |            |   |             |       |
| headNurseID | Recursive FK, One nurse<br>supervises another nurse | int       |      |          |        |         |            |   |             |       |

#### Table: assignment

| Column Name  | Description             | Data Type | Size  | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|--------------|-------------------------|-----------|-------|----------|--------|---------|------|-------|-------------|-------|
| assignmentID | PK of assignment        | int       |       | Y        |        |         |      |       |             | Y     |
|              | date of the assignment  |           |       |          |        |         |      |       |             |       |
| date         | to the Nurse            | date      |       |          |        |         |      |       |             |       |
|              | Hours that nurse worked |           |       |          |        |         |      |       |             |       |
| hour         | on the assignment       | decimal   | (4,2) |          |        |         |      |       |             |       |
| nurseID      | FK of nurse             | int       |       |          |        |         |      |       |             | Y     |
| wardID       | FK of ward              | int       |       |          |        |         |      |       |             | Y     |

#### Table: ward

| Column Name     | Description                                     | Data Type | Size | Identity | Unique | Default | Rule       | Check | Allow Nulls | Index |
|-----------------|---|-----------|------|----------|--------|---------|------------|-------|-------------|-------|
| wardID          | PK of Ward                                      | int       |      | Y        |        |         |            |       |             | Y     |
|                 | The name of the location of                     |           |      |          |        |         |            |       |             |       |
| locationName    | the ward  | nvarchar  | 30   |          |        |         |            |       |             |       |
| phoneNum        | Phone number of the ward                        | char      | 14   |          |        |         | phone rule |       |             |       |
|                 | FK of nurse; the nurse that is in charge of the |           |      |          |        |         |            |       |             |       |
| wardHeadNurseID | ward  | int       |      |          |        |         |            |       |             |       |

# Table: bed

| Column Name  | Description             | Data Type | Size | Identity | Unique | Default | Rule | Check                 | Allow Nulls | Index |
|--------------|-------------------------|-----------|------|----------|--------|---------|------|-----------------------|-------------|-------|
| bedID        | PK of bed               | int       |      | Y        |        |         |      |                       |             | Y     |
| bedSize      | Size of the bed         | char      | 2    |          |        | L'      |      | LIKE 'S' OR M' OR 'L' |             |       |
| bedType      | Type of the bed         | char      | 1    |          |        | M'      |      | LIKE 'E' or 'M'       |             |       |
| availability | availability of the bed | char      | 1    |          |        | M'      |      | LIKE 'O' OR 'A'       |             |       |
| wardID       | FK of ward              | int       |      |          |        |         |      |                       |             | Y     |

#### Table: patient

| Column Name | Description                      | Data Type | Size | Identity | Unique | Default | Rule                    | Check                                   | Allow Nulls | Index |
|-------------|----------------------------------|-----------|------|----------|--------|---------|-------------------------|---|-------------|-------|
| patientID   | PK of patient                    | int       |      | Y        |        |         |                         |   |             | Y     |
| firstName   | First name of the patient        | nvarchar  | 30   |          |        |         |                         |   |             |       |
| lastName    | Last name of the patient         | nvarchar  | 30   |          |        |         |                         |   |             |       |
| gender      | Gender of the patient            | char      | 2    |          |        |         | LIKE 'M' OR 'F' OR 'NA' |   |             |       |
| dateOfBirth | Date of birth of the patient     | date      |      |          |        |         |                         |   |             |       |
| phoneNum    | Phone Number of the patient      | char      | 14   |          |        |         | phone rule              |   |             |       |
| street      | Street name of patient           | nvarchar  | 50   |          |        |         |                         |   |             |       |
| city        | City of the patient              | nvarchar  | 25   |          |        |         |                         |   |             |       |
| state       | State of the patient             | nvarchar  | 2    |          |        |         |                         | LIKE '[A-Z] [A-Z]'                      |             |       |
| zip         | Zip code of the patient          | char      | 5    |          |        |         |                         | LIKE '[0-9] [0-9]<br>[0-9] [0-9] [0-9]' |             |       |
| altPhone    | Alternative phone of the patient | char      | 14   |          |        |         | phone rule              |   |             |       |
| email       | Email of the patient             | nvarchar  | 50   |          |        |         |                         |   |             |       |
| [Age]       | Age of the patient               | computed  |      |          |        |         |                         |   |             | Y     |
| bedID       | FK of bed                        | int       |      |          |        |         |                         |   |             |       |

## Table: Care

| Column Name | Description       | Data Type | Size  | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|-------------|-------------------|-----------|-------|----------|--------|---------|------|-------|-------------|-------|
| careID      | PK of care        | int       |       | Y        |        |         |      |       |             | Y     |
| event       | event of the care | nvarchar  | 50    |          |        |         |      |       |             |       |
| date        | date of care      | date      |       |          |        |         |      |       |             |       |
| time        | time of the care  | decimal   | (4,2) |          |        |         |      |       |             |       |

| nurseID   | FK for Nurse  | int |  |  |  | Y |
|-----------|---------------|-----|--|--|--|---|
| patientID | FK of patient | int |  |  |  | Y |

### Table: itemCharged

| Column Name   | Description              | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|---------------|--------------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| itemChargedID | PK of item charged       | int       |      | Y        |        |         |      |       |             | Y     |
| date          | date of the item charged | date      |      |          |        |         |      |       |             |       |
| amount        | amount(count) of items   | int       |      |          |        |         |      |       |             |       |
| itemID        | FK of item               | int       |      |          |        |         |      |       |             |       |
| patientID     | FK of patient            | int       |      |          |        |         |      |       |             |       |

#### Table: item

| Column Name | Description              | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|-------------|--------------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| itemID      | PK of item               | int       |      |          |        |         |      |       |             | Y     |
| name        | Name of the item used    | nvarchar  | 50   |          |        |         |      |       |             |       |
| charge      | Charge price of the item | money     |      |          |        |         |      |       |             |       |

# Table: admitDischarge

| Column Name     | Description                | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|-----------------|----------------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| admDiscID       | PK of admitDischarge       | int       |      | Y        |        |         |      |       |             | Y     |
| adimissionDate  | date of admission          | date      |      |          |        |         |      |       |             |       |
| dischargeDate   | date of discharge          | date      |      |          |        |         |      |       |             |       |
| admissionDoctor | FK of doctor for admission | int       |      |          |        |         |      |       |             |       |
| dischargeDoctor | FK of doctor for discharge | int       |      |          |        |         |      |       |             |       |

### Tabel: doctor

| Column Name | Description                 | Data Type | Size | Identity | Unique | Default | Rule       | Check                                   | Allow Nulls | Index |
|-------------|-----------------------------|-----------|------|----------|--------|---------|------------|---|-------------|-------|
| doctorID    | PK of doctor                | int       |      | Y        |        |         |            |   |             | Y     |
| firstName   | First name of doctor        | nvarchar  | 30   |          |        |         |            |   |             |       |
| lastName    | Last name of the doctor     | nvarchar  | 30   |          |        |         |            |   |             |       |
| phoneNum    | Phone Number of the doctor  | char      | 14   |          |        |         | phone rule |   |             |       |
| street      | Street name of doctor       | nvarchar  | 50   |          |        |         |            |   |             |       |
| city        | City of the doctor          | nvarchar  | 25   |          |        |         |            |   |             |       |
| state       | State of the nurse          | nvarchar  | 2    |          |        |         |            | LIKE '[A-Z] [A-Z]'                      |             |       |
| zip         | Zip code of the doctor      | char      | 5    |          |        |         |            | LIKE '[0-9] [0-9]<br>[0-9] [0-9] [0-9]' |             |       |
| altPhone    | Alternative phone of doctor | char      | 14   |          |        |         | phone rule |   | Y           |       |
| email       | Email of the doctor         | nvarchar  | 50   |          |        |         |            |   |             |       |

# Table: medicalSpecialtiesDoctor

| Column Name | Description                    | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|-------------|--------------------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| doctorID    | FK of doctor                   | int       |      | Y        |        |         |      |       |             | Y     |
| specDocID   | FK of medicalSpecialtiesDoctor | int       |      |          |        |         |      |       |             |       |

### Table: specialtiesDoctor

| Column Name | Description              | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|-------------|--------------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| specDocID   | PK for specialtiesDoctor | int       |      | Y        |        |         |      |       |             | Y     |
| specDoc     | Speciaity of doctors     | char      | 50   |          |        |         |      |       |             |       |

### Table: administer

| Column Name      | Description          | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|------------------|----------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| adminTreatmentID | PK of admister       | int       |      | Y        |        |         |      |       |             | Y     |
| date             | date of admister     | date      |      |          |        |         |      |       |             |       |
| time             | time of the admister | time      |      |          |        |         |      |       |             |       |
| results          | result of admister   | nvarchar  |      |          |        |         |      |       |             |       |
| doctorID         | FK of doctor         | int       |      |          |        |         |      |       |             | Y     |
| patientID        | FK of patient        | int       |      |          |        |         |      |       |             | Y     |
| treatmentID      | FK of treatment      | int       |      |          |        |         |      |       |             | Y     |

## Table: treatment

| Column Name | Description                  | Data Type | Size | Identity | Unique | Default | Rule | Check | Allow Nulls | Index |
|-------------|------------------------------|-----------|------|----------|--------|---------|------|-------|-------------|-------|
| treatmentID | Pk of treatment              | int       |      | Y        |        |         |      |       |             | Y     |
| description | description of the treatment | nvarchar  | 50   |          |        |         |      |       |             |       |