#### **ADMISSION PROCEDURE**

#### **UNF**

ADMISSION\_PROCEDURE (patientID, patientName, admissionDate, doctorID, doctorName, {procCode, procName, procCharge, reqDoctorID, reqDoctorName, perfDoctorID, perfDoctorName, procDate, {itemCode, itemDesc, itemQuant, itemPrice, itemTotalCharge}, extraTotalCharge})

#### 1NF

ADMISSION (patientID, admissionDate, patientName, doctorID, doctorName)

PROCEDURE (<u>patientID</u>, <u>procDate</u>, <u>procCode</u>, <u>procCode</u>, <u>procCharge</u>, reqDoctorID, reqDoctorName, <u>perfDoctorID</u>, <u>perfDoctorName</u>, <u>extraTotalCharge</u>)

ITEM (patientID, procDate, itemCode, itemDesc, itemQuant, itemPrice, itemTotalCharge)

## **Dependency Diagrams**

```
patientID, admissionDate → doctorID (FULL)

patientID → patientName (PARTIAL)

doctorID → doctorName (TRANSITIVE)

patientID, procDate → procCode, reqDoctorID, perfDoctorID, extraTotalCharge (FULL)

procCode → procName, procCharge (TRANSITIVE)

reqDoctorID → reqDoctorName (TRANSITIVE)

perfDoctorID → perfDoctorName (TRANSITIVE)

patientID, procDate, itemCode → itemQuant, itemTotalCharge (FULL)

itemCode → itemDesc, itemPrice (PARTIAL)
```

# 2NF

PATIENT (patientID, patientName)

ADMISSION (patientID, admissionDate, doctorID, doctorName)

PROCEDURE (<u>patientID</u>, <u>procDate</u>, procCode, procName, procCharge, reqDoctorID, reqDoctorName, perfDoctorID, perfDoctorName, extraTotalCharge)

ITEM (<u>itemCode</u>, itemDesc, itemPrice)

EXTRA ITEM (patientID, procDate, itemCode, itemQuant, itemTotalCharge)

#### 3NF

PATIENT (patientID, patientName)

DOCTOR (doctorID, doctorName)

ADMISSION (patientID, admissionDate, doctorID)

PROCEDURE INFORMATION (procCode, procName, procCharge)

PROCEDURE (patientID, procDate, procCode, reqDoctorID, perfDoctorID, extraTotalCharge)

ITEM (<u>itemCode</u>, itemDesc, itemPrice)

EXTRA ITEM (patientID, procDate, itemCode, itemQuant, itemTotalCharge)

#### **NURSE**

#### **UNF**

NURSE (nurseID, nurseFName, nurseLName, nursePhone, nurseCert, {wardCode, wardName, startDate, endDate})

### 1NF

NURSE (<u>nurseID</u>, nurseFName, nurseLName, nursePhone, nurseCert)

 ${\tt ALLOCATION~(} \underline{nurseID, startDate}, end Date, wardCode, wardName)$ 

## **Dependency Diagrams**

nurseID → nurseFName, nurseLName, nursePhone, nurseCert (FULL)

nurseID, startDate → endDate, wardCode (FULL)

wardCode → wardName (PARTIAL)

### 2NF

NURSE (<u>nurseID</u>, nurseFName, nurseLName, nursePhone, nurseCert)

ALLOCATION (<u>nurseID</u>, <u>startDate</u>, endDate, wardCode, wardName)

WARD (wardCode, wardName)

### 3NF

NURSE (<u>nurseID</u>, nurseFName, nurseLName, nursePhone, nurseCert)

ALLOCATION (nurseID, startDate, endDate, wardCode, wardName)

## WARD (<u>wardCode</u>, wardName)

### **COLLECTED 3NF RELATIONS**

PATIENT (<u>patientID</u>, patientName)

DOCTOR (doctorID, doctorName)

ADMISSION (patientID, admissionDate, doctorID, doctorName)

PROCEDURE INFORMATION (procCode, procName, procCharge)

PROCEDURE (patientID, procDate, reqDoctorID, perfDoctorID, extraTotalCharge)

ITEM (<u>itemCode</u>, itemDesc, itemPrice)

EXTRA ITEM (patientID, procDate, itemCode, itemQuant, itemTotalCharge)

NURSE (<u>nurseID</u>, nurseFName, nurseLName, nursePhone, nurseCert)

ALLOCATION (<u>nurseID</u>, <u>startDate</u>, endDate, wardCode, wardName)

WARD (<u>wardCode</u>, wardName)