

Indexes by Table

- **Patient**
 - caseID : Primary Key
 - Age : Patient records could be searched by age. For example, patient records can be sorted by age to analyze the relation between age and discharge rate by an insurance company.
- **HospitalCase**
 - caseID : Primary Key
 - hospitalID : Hospital cases can be grouped by hospital types. For example, CDC may want to find out which type of hospital discharges the most patients with certain injury or disease.
 - daysOfCare : An average days of care could be frequently calculated. For example, an insurance company may want to weekly update their base rate based on the national average number of days that patients are treated in a hospital.
 - DRG : Hospital cases can be frequently sorted by DRG. For example, an insurance company may want to analyze which diagnosis-related group received the largest or least amount of support from health providers.
- **Diagnosed**
 - caseID : Primary Key
- **Diagnosis**
 - diagCode : Primary Key
- **Treated**
 - caseID : Primary Key
- **Procedure**
 - procCode : Primary Key
- **Payment**
 - caseID : Primary Key
- **Hospital**
 - hospitalID : Primary Key

Triggers by Table

- **HospitalCase** [Before Delete]
 - TRG_DELETE_CASE
 - When a hospital case record is deleted, the patient, diagnosis, procedure, and payment records for the deleted hospital case should be deleted.
- **Diagnosis** [After Update]
 - TRG_UPDATE_DIAGNOSISCODE
 - When an exiting diagnosis code is changed, the code recorded for hospital cases (Table: Diagnosed) and the code recorded for case's admitting diagnosis (Table: HospitalCase) should be updated.
- **Procedure** [After Update]
 - TRG_UPDATE_PROCEDURECODE
 - When an exiting procedure code is changed, the code recorded for hospital cases (Table: Treated) should be updated.

Stored Procedures

- **p_averageDaysOfStayByRegion**

- Parameters
 - IN region INT
 - 1 : Northeast
 - 2 : Midwest
 - 3 : South
 - 4 : West
 - OUT avg DOUBLE
- Calculates the average number of estimated days of stay in the given region, and store in the given variable 'avg'.

- **p_countDischargeStatus**

- Parameters
 - IN cntD INT
 - Number of diagnosis code assigned to a single hospital case.
 - Must be greater than 0.
 - IN cntP INT :
 - Number of procedure code assigned to a single hospital case.
 - Can be 0, and negative values are treated as 0.
- Shows the number of discharges for each discharge status.

- **p_countPatientByAge**

- IN ageUnit INT
 - 1 : Years
 - 2 : Months
 - 3 : Days
- IN age INT
 - Years: 0-90
 - Months: 1-11
 - Days: 0-28
- INOUT count INT
- Counts the number of patients with the given age and add to the given count variable.