

# Project Development Phase

## Delivery of Sprint-1

Date	10 NOV 2022
Team ID	PNT2022TMID04319
Project Name	Analytics for Hospital's Health-care Data

### DATASET

#### Data Collection:

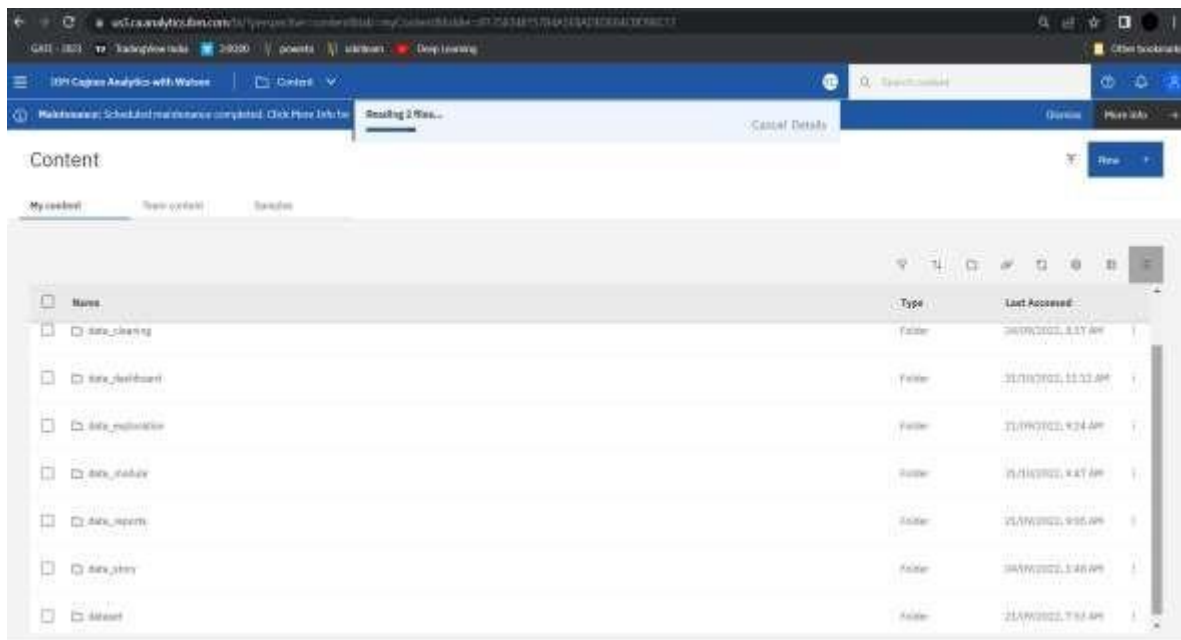
Downloading the Dataset

#### Dataset :

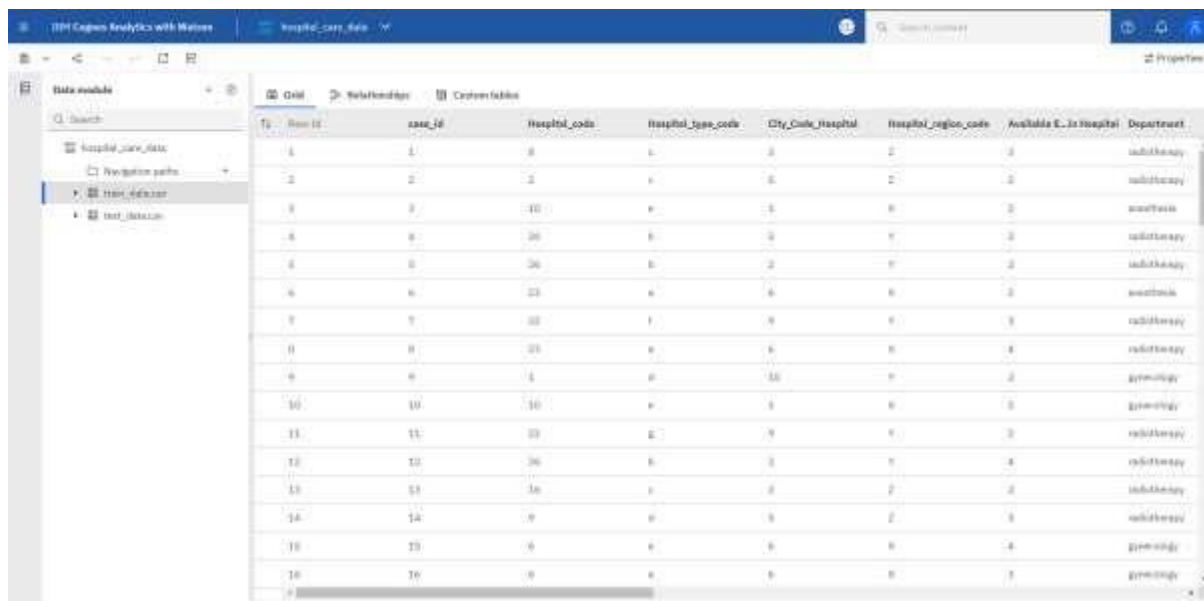
[https://drive.google.com/file/d/1AHcg2b\\_x\\_pt6LHP2mQVJX-NwxykN4VUx/view?usp=sharing](https://drive.google.com/file/d/1AHcg2b_x_pt6LHP2mQVJX-NwxykN4VUx/view?usp=sharing)

#### Load the Dataset:

Tool used: IBM Cognos Analytics



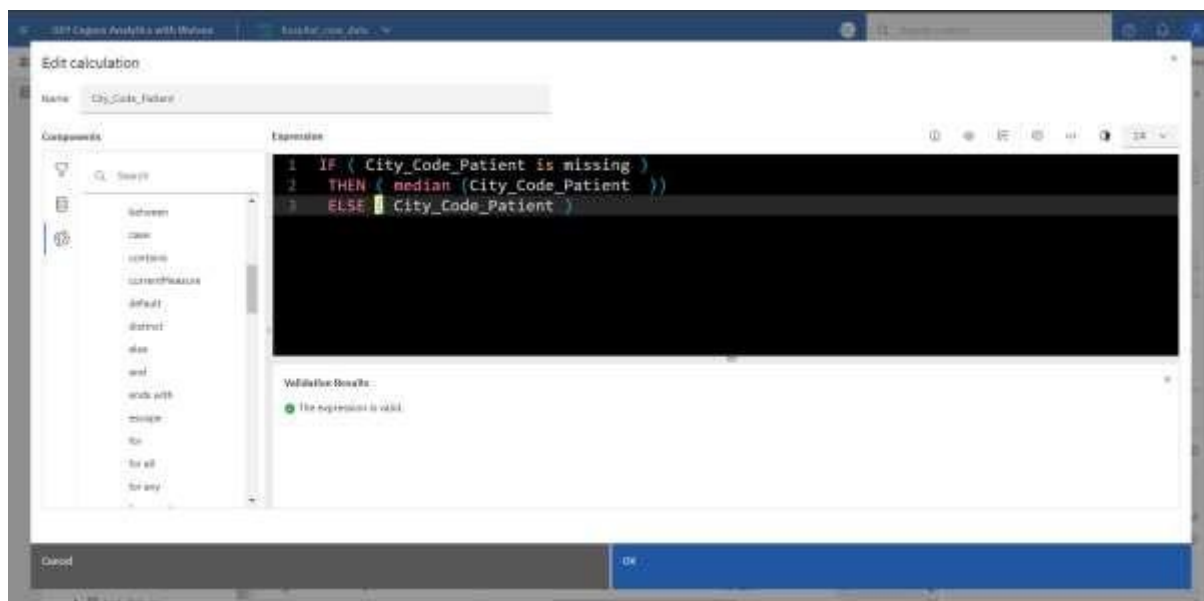
## Data Preparation :



The screenshot shows the IBM Cognos Analytics interface with a data table. The table has 16 rows and 9 columns. The columns are: ID, Row ID, case\_id, Hospital\_code, Hospital\_type\_code, City\_Code\_hospital, Hospital\_region\_code, Available E..to Hospital, and Department. The data is as follows:

ID	Row ID	case_id	Hospital_code	Hospital_type_code	City_Code_hospital	Hospital_region_code	Available E..to Hospital	Department
1	1	1	8	1	3	2	3	radiology
2	2	2	2	1	5	2	2	radiology
3	3	3	10	1	4	3	2	radiology
4	4	4	26	1	2	1	2	radiology
5	5	5	26	1	2	1	2	radiology
6	6	6	23	1	4	3	2	radiology
7	7	7	22	1	4	3	2	radiology
8	8	8	23	1	4	3	2	radiology
9	9	9	4	1	10	1	2	radiology
10	10	10	10	1	4	3	2	radiology
11	11	11	23	1	4	3	2	radiology
12	12	12	26	1	2	1	2	radiology
13	13	13	26	1	2	1	2	radiology
14	14	14	9	1	4	3	2	radiology
15	15	15	9	1	4	3	2	radiology
16	16	16	9	1	4	3	2	radiology

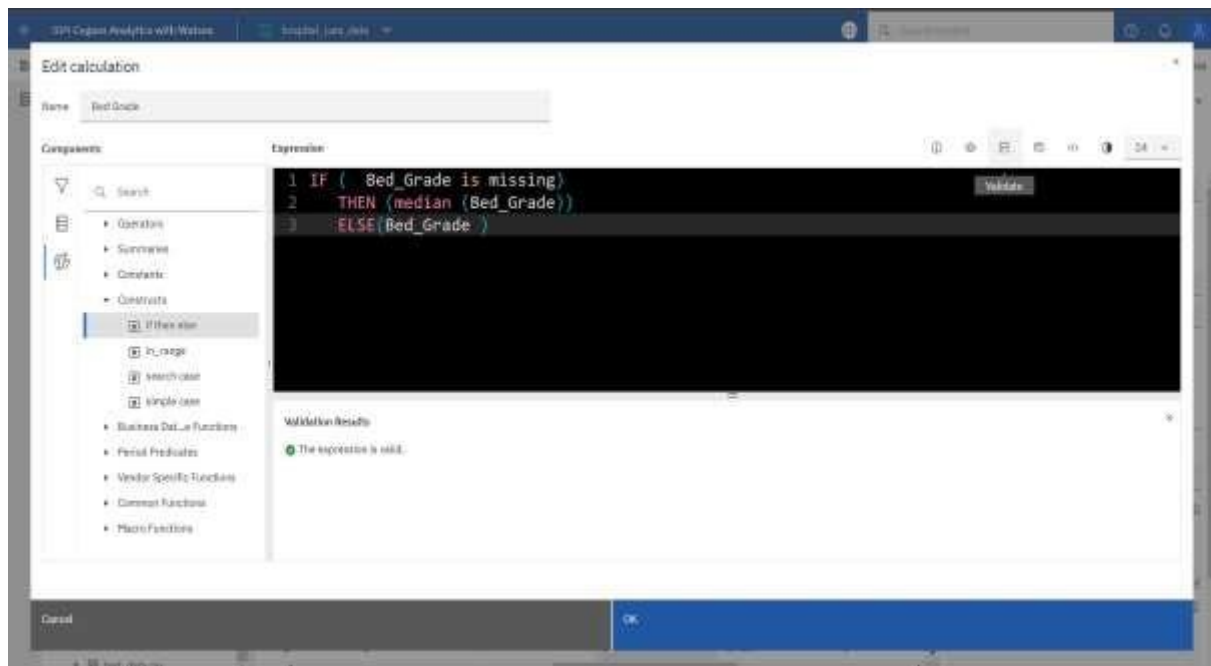
## Null Values cleaning Process :



The screenshot shows the 'Edit calculation' dialog box in IBM Cognos Analytics. The 'Name' field is set to 'City\_Code\_Patient'. The 'Expression' field contains the following SQL code:

```
1 IF ( City_Code_Patient is missing )
2 THEN ( median (City_Code_Patient ) )
3 ELSE ( City_Code_Patient )
```

The 'Validate Results' section shows a green checkmark and the text 'The expression is valid'.



Qlik Sense Analytics with Watson

hospital\_data

Search: hospital\_data

Properties

Data model

Search:

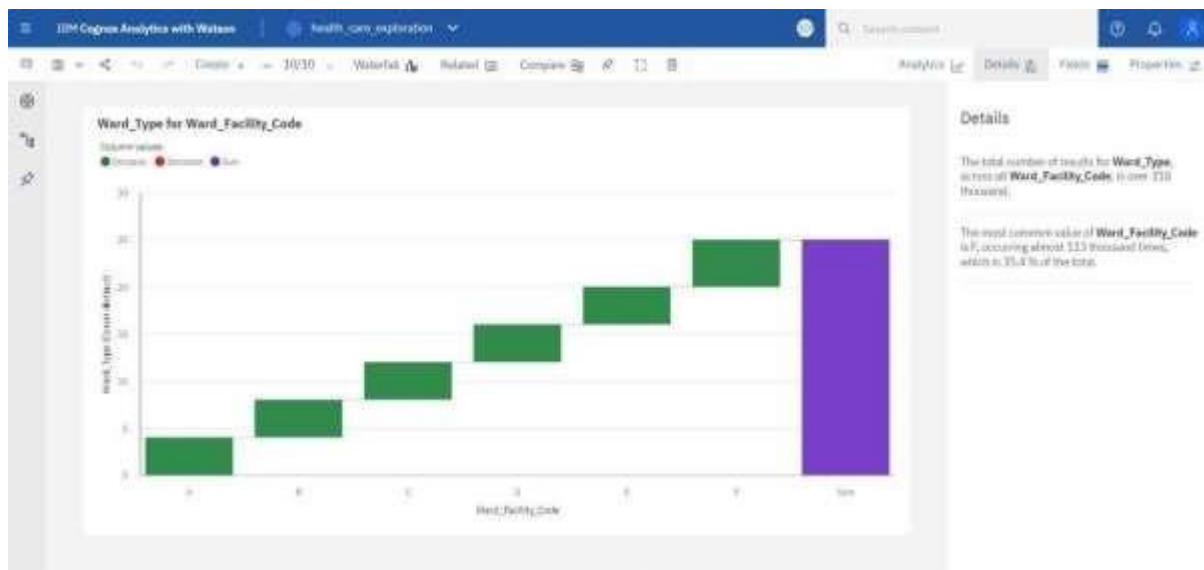
- hospital\_data
- Time
- Case
- Hospital\_code
- Hospital\_pt\_code
- City\_Code\_Hospital
- Hospital\_Acc\_code
- Available\_Hospital
- Department
- Ward\_Type
- Ward\_Facility\_Code
- Bed Grade
- potential
- City\_Code\_Patient
- Type of Admission
- Severity of Illness
- Visitors - In Patient
- Age
- Admission\_Deposit
- Stay
- test\_data.csv

Ts	ref	Ward_Type	Ward_Facility_Code	Bed Grade	potential	City_Code_Patient	Type of Admission	Severity of Illness
ADV	5	3	3	2	01287	5	Emergency	Extreme
ADV	5	3	3	2	01287	5	Trauma	Extreme
W	5	5	5	2	01287	5	Trauma	Extreme
ADV	5	3	3	2	01287	5	Trauma	Extreme
ADV	5	3	3	2	01287	5	Trauma	Extreme
W	5	3	3	2	01287	5	Trauma	Extreme
ADV	3	3	3	3	01287	5	Emergency	Extreme
ADV	0	3	3	3	01287	5	Trauma	Extreme
IC	5	3	3	4	01287	5	Trauma	Extreme
IC	5	3	3	3	01287	5	Trauma	Extreme
ADV	5	3	3	2	01287	5	Urgent	Extreme
ADV	5	3	3	1	01287	5	Urgent	Extreme
ADV	5	3	3	3	01287	5	Emergency	Extreme
ADV	3	3	3	3	01287	5	Urgent	Extreme
IC	0	3	3	3	01413	5	Emergency	Extreme
IC	0	3	3	3	01413	5	Emergency	Extreme

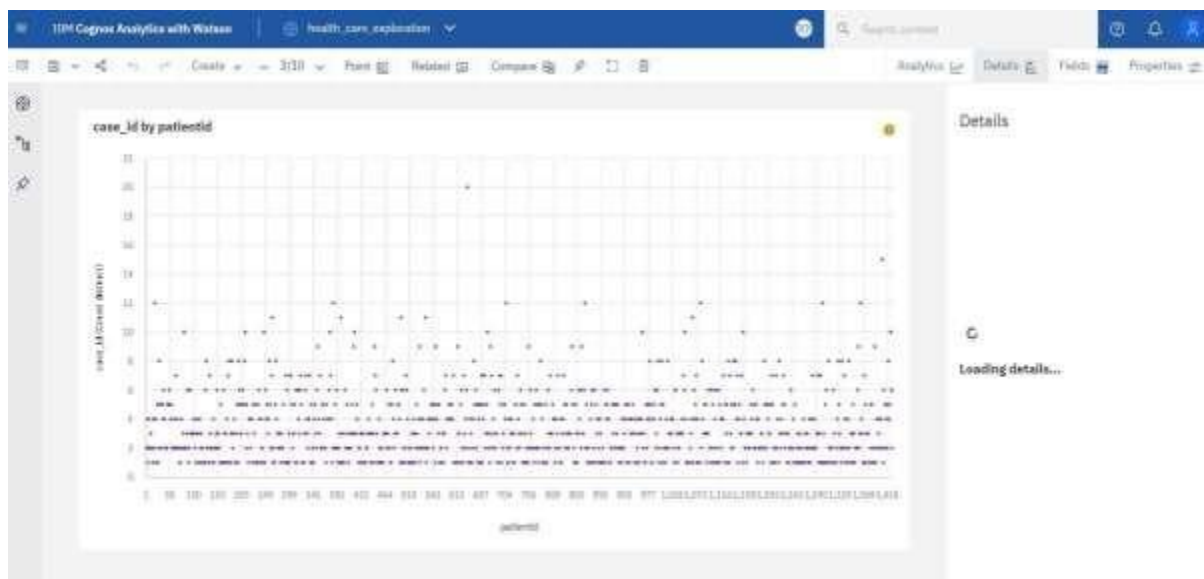
[illegible][illegible]

## DATA EXPLORATION :

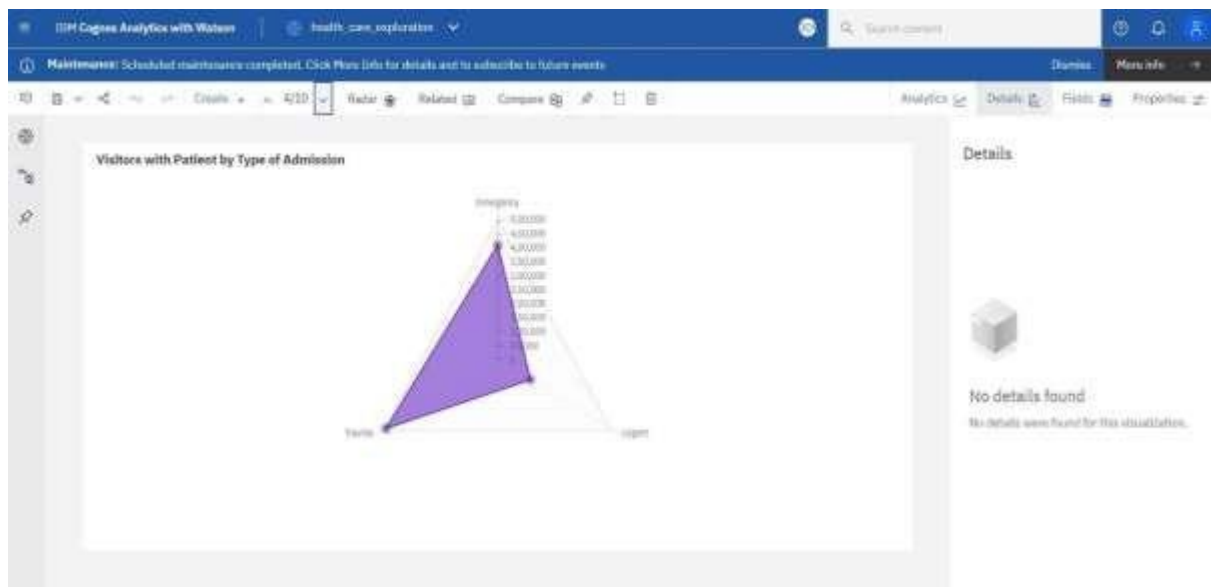
### 1. Ward\_Type for Ward\_Facility\_Code:



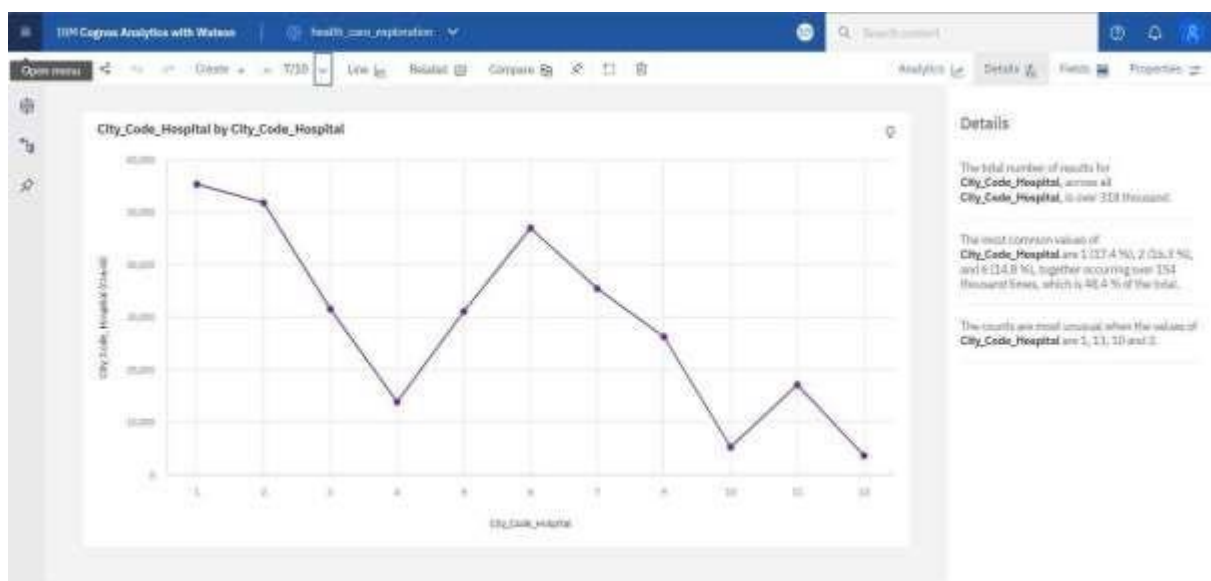
### 2. Case\_id by Patient\_id



### 3. Visitors with Patient by Type of Admission:



### 4.City\_Code\_Hospital by City\_Code\_Hospital:



## 5.City\_Code\_Hospital by Department:

