

# Project Development Phase

## Delivery of Sprint-1

Date	29 OCT 2022
Team ID	PNT2022TMID39763
Project Name	Analytics for Hospitals' Health-Care Data

### Project Development Phase:

#### **Sprint-1:**

- Data Collection
- Data Preparation

#### **Sprint-2:**

- Data Exploration

#### **Sprint-3:**

- Dashboard Creation

#### **Sprint-4:**

- Report Creation
- Story Creation



# ANALYTICS FOR HOSPITAL'S HEALTH-CARE DATA

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TEAM ID : PNT2022TMID39763

# Sprint-1:

**Data Collection:** Download the Dataset Dataset link :

[https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di\\_SFhUNdUKUdjkhRT?usp=sharing](https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjkhRT?usp=sharing)

## Load the Dataset:

**Tool used:** IBM Cognos Analytics

IBM Cognos Analytics with Watson

Maintenance: Scheduled maintenance completed. Click I

Reading test\_data.csv... Cancel Details Dismiss More info →

Hello. Welcome to Cognos Analytics with Watson.

You can get started right away by taking a look at our introduction video, product tour and Getting Started tab.

Watch video Take a product tour

Quick launch

- Upload data**  
Upload or drag and drop spreadsheets, csv files, and other
- Prepare data**  
Use data modules to clean and connect data from multiple
- Exploration**  
Quickly find unbiased answers by identifying trends in your data with
- Present data**  
Create sophisticated, multi-page, multi-query dashboards, reports,

# Data Preparation:

## Prepare the Dataset

IBM Cognos Analytics with Watson

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Grid

Relationships

Custom tables

↕	Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hospital	Depart
	1	1	8	c	3	Z	3	radic
	2	2	2	c	5	Z	2	radic
	3	3	10	e	1	X	2	anes
	4	4	26	b	2	Y	2	radic
	5	5	26	b	2	Y	2	radic
	6	6	23	a	6	X	2	anes
	7	7	32	f	9	Y	1	radic
	8	8	23	a	6	X	4	radic
	9	9	1	d	10	Y	2	gyne
	10	10	10	e	1	X	2	gyne
	11	11	22	g	9	Y	2	radic
	12	12	26	b	2	Y	4	radic
	13	13	16	c	3	Z	2	radic

# Null Values Cleaning Process :

The screenshot shows the 'Edit calculation' dialog 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 'Components' list on the left includes: between, case, contains, currentMeasure, default, distinct, else, end, ends with, escape, for, for all, for any.

The 'Validation Results' section shows a green checkmark and the message: 'The expression is valid.'

At the bottom, there are 'Cancel' and 'OK' buttons.

IBM Cognos Analytics with Watson

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Edit calculation

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Name

Bed Grade

Components

Expression

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▶ Operators

▶ Summaries

▶ Constants

▼ Constructs

# if then else

# in\_range

# search case

# simple case

▶ Business Dat...e Functions

▶ Period Predicates

▶ Vendor Specific Functions

▶ Common Functions

▶ Macro Functions

1 IF ( Bed\_Grade is missing)

2 THEN (median (Bed\_Grade))

3 ELSE(Bed\_Grade )

Validate

Validation Results

×

✔ The expression is valid.

Cancel

OK

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🔗 Relationships

📄 Custom tables

↕	Department	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of Admission	Severi
	radiotherapy	R	F	2	31397	7	Emergency	Extr
	radiotherapy	S	F	2	31397	7	Trauma	Extr
	anesthesia	S	E	2	31397	7	Trauma	Extr
	radiotherapy	R	D	2	31397	7	Trauma	Extr
	radiotherapy	S	D	2	31397	7	Trauma	Extr
	anesthesia	S	F	2	31397	7	Trauma	Extr
	radiotherapy	S	B	3	31397	7	Emergency	Extr
	radiotherapy	Q	F	3	31397	7	Trauma	Extr
	gynecology	R	B	4	31397	7	Trauma	Extr
	gynecology	S	E	3	31397	7	Trauma	Extr
	radiotherapy	S	B	2	31397	7	Urgent	Extr
	radiotherapy	R	D	1	31397	7	Urgent	Extr
	radiotherapy	R	A	3	31397	7	Emergency	Extr

# Hospital Data :

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Custom tables

↕	Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hospital	Depart
	1	1	8	c	3	Z	3	radic
	2	2	2	c	5	Z	2	radic
	3	3	10	e	1	X	2	anes
	4	4	26	b	2	Y	2	radic
	5	5	26	b	2	Y	2	radic
	6	6	23	a	6	X	2	anes
	7	7	32	f	9	Y	1	radic
	8	8	23	a	6	X	4	radic
	9	9	1	d	10	Y	2	gyne
	10	10	10	e	1	X	2	gyne
	11	11	22	g	9	Y	2	radic
	12	12	26	b	2	Y	4	radic
	13	13	16	c	3	Z	2	radic



Grid

Relationships

Custom tables

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↕	City_Code_Patient	Type of Admission	Severity of Illness	Visitors with Patient	Age	Admission_Deposit	Stay
	7	Emergency	Extreme	2	51-60	4911	0-10
	7	Trauma	Extreme	2	51-60	5954	41-50
	7	Trauma	Extreme	2	51-60	4745	31-40
	7	Trauma	Extreme	2	51-60	7272	41-50
	7	Trauma	Extreme	2	51-60	5558	41-50
	7	Trauma	Extreme	2	51-60	4449	11-20
	7	Emergency	Extreme	2	51-60	6167	0-10
	7	Trauma	Extreme	2	51-60	5571	41-50
	7	Trauma	Extreme	2	51-60	7223	51-60
	7	Trauma	Extreme	2	51-60	6056	31-40
	7	Urgent	Extreme	2	51-60	5797	21-30
	7	Urgent	Extreme	2	51-60	5993	11-20
	7	Emergency	Extreme	2	51-60	5141	0-10

# Prepared data link :

[https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my\\_folders%2Fsprint%2B1](https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2Fsprint%2B1)

