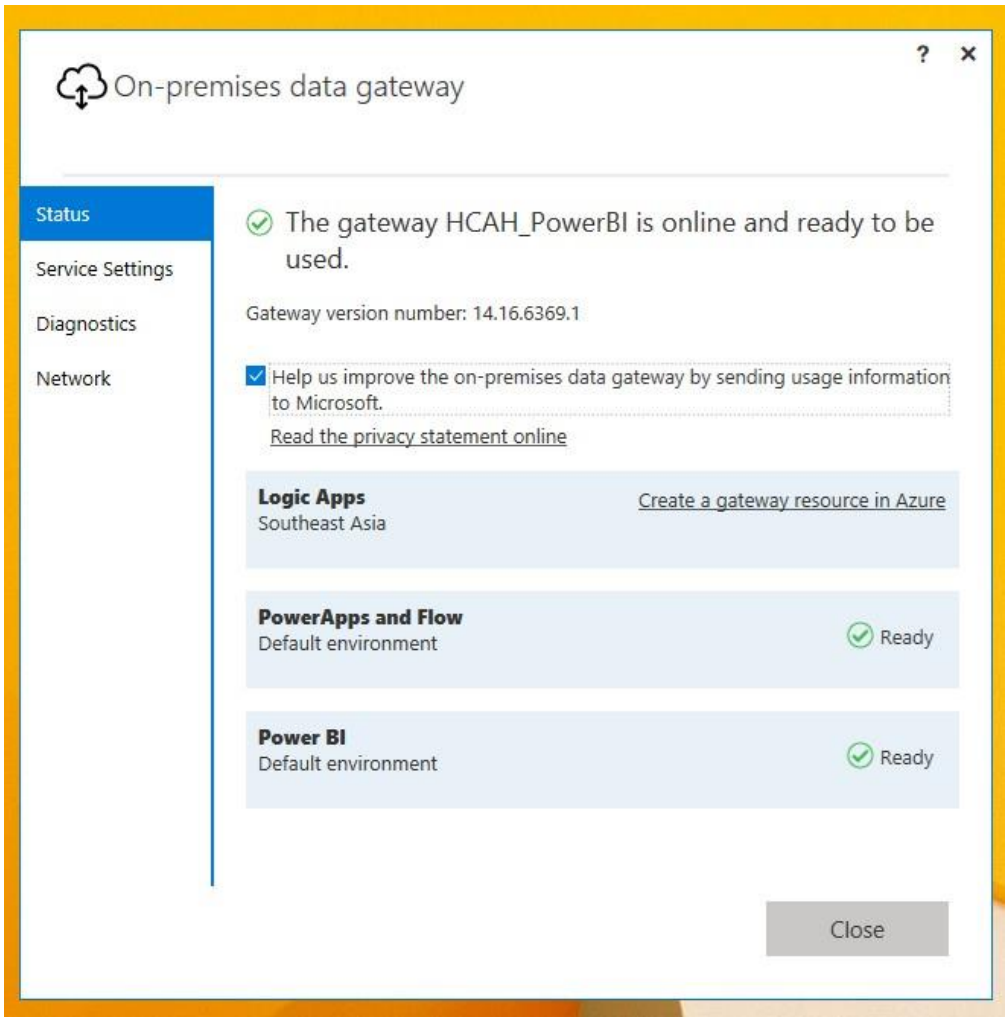
Power BI for Business Intelligence Reporting
For
Healthcare atHome India Pvt Ltd

Data refresh Gateway:



The On-Premise Data gateway is installed on the BI laptop. The Laptop must be kept on at all times for the refresh to work.

Login: xxxxxxxxxxxxxx

Password: xxxxxxxxxxxxxx

Refresh times: 8am, 10am, 12pm, 4pm

If refresh fails multiple times (due to reasons like laptop switch off, user not signed in, internet issues) the scheduler will get disabled. The developer will have to manually enable it for it to work next time.

POWER BI REPORTS

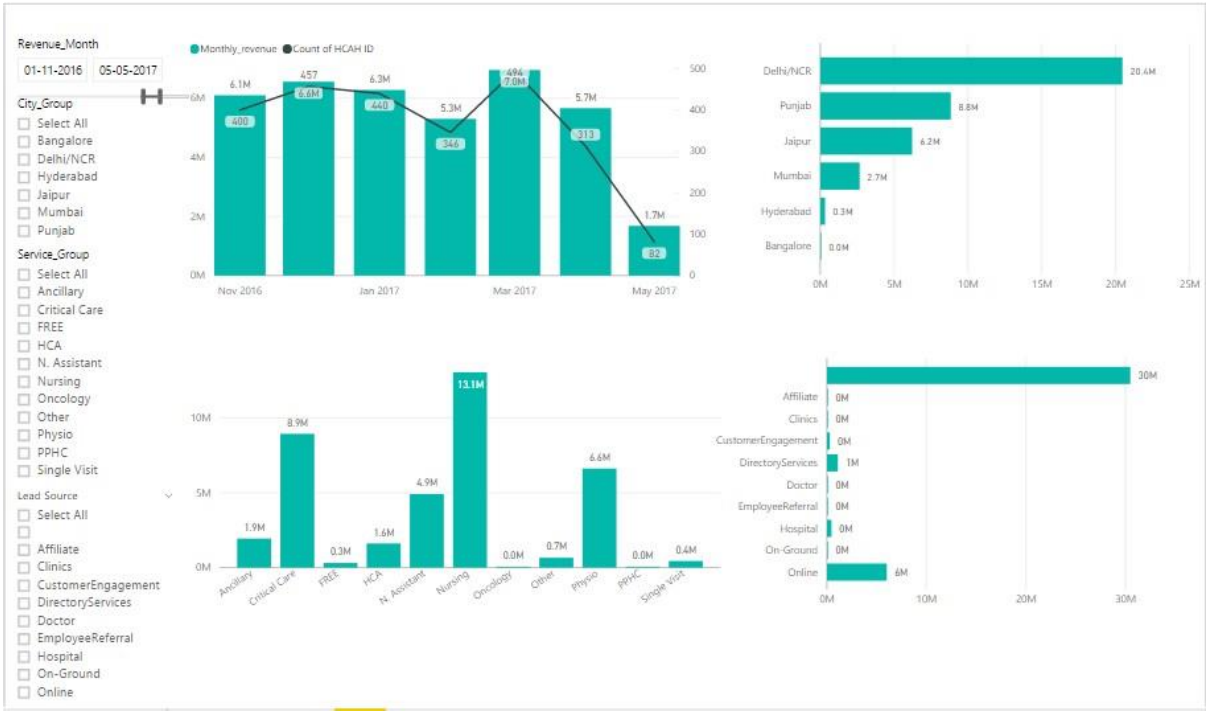
I. Document Objective:

Detail the scope and specifications for a BI report to be created for Health Care At Home India Pvt. Ltd.

II. Report design – Requirements and specifications

The report will be viewed by the management, board and analysts of the company on daily basis for deriving insights about the growth pattern across months, locations, services, and source of leads.

1. The following charts will be seen on the report. And along with the filters in the left hand side panel.



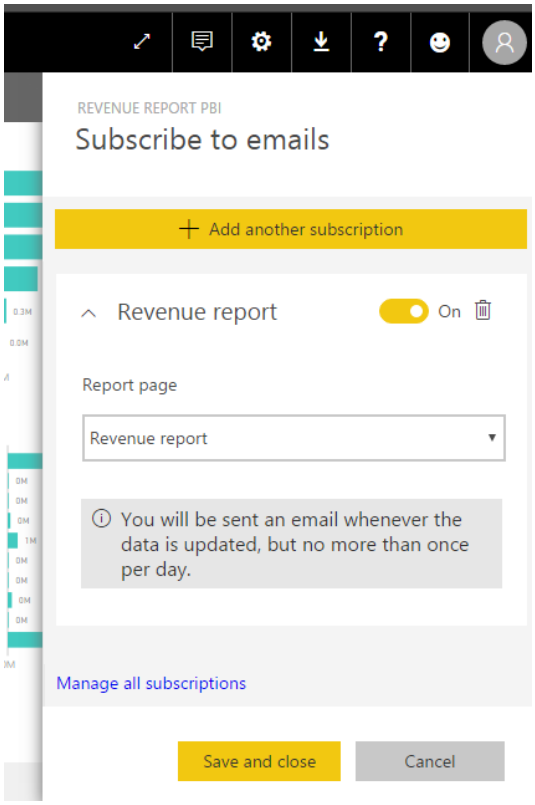
2. The reports will be interconnected: Meaning, when an end user click on a data-bar, the connected charts will adjust to the corresponding data.

3. The underlying records will be exported along with the report: To allow end user to download the data for additional analysis in excel.

4. The design will be Mobile Compatible (download Power BI App available on Android, Windows, and iOS) to view it.

The user will be able to subscribe to email alert when update is made in the data. The report can be viewed in the Power BI mobile app or on Power BI webpage by Login.

5. The report can be shared with multiple users with RLS (row level security) if they have Pro BI license.

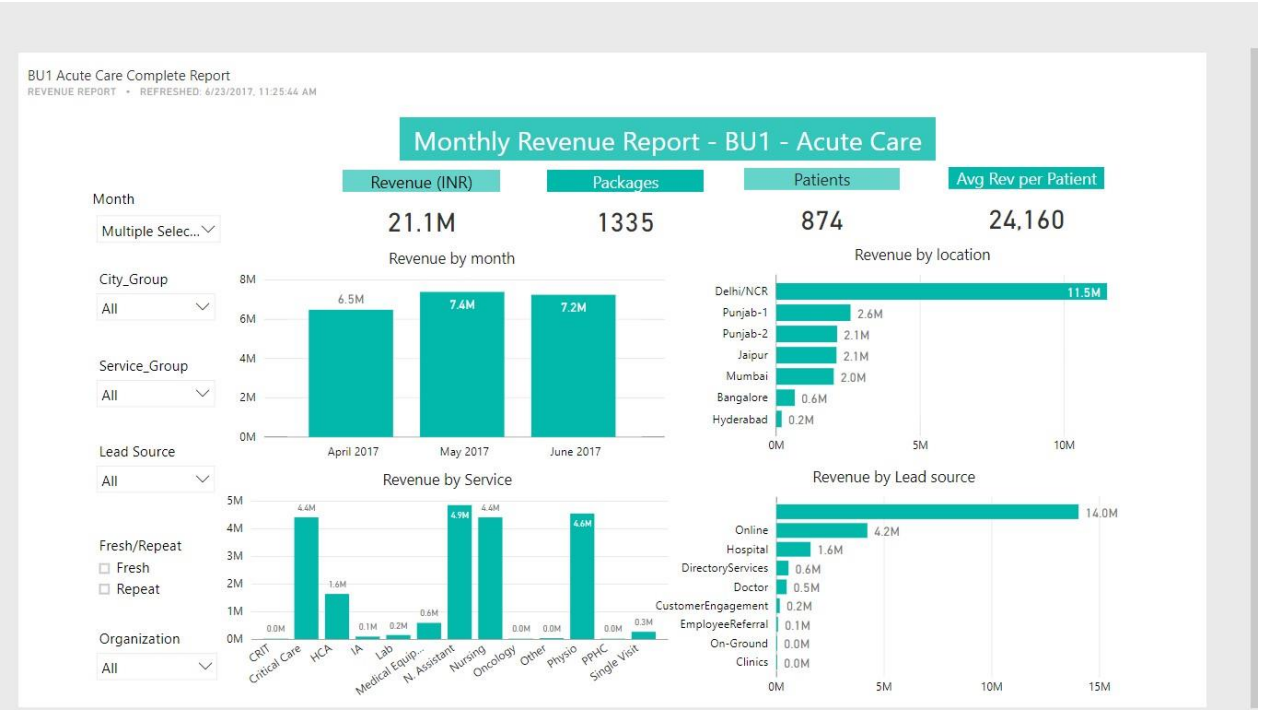


SPRINT-1

BU1 Acute Care – Monthly Revenue Report

This report gives brief insights about the revenue growth pattern of Business Unit 1 (BU1) across months, locations, services, and source of leads.

The design layout of the report is shown below:



Various slicers like of month, City group, Service_group, Lead source, Fresh/Repeat and Organization are added on the left hand side panel which allows to user to narrow down the portion of the dataset shown in the other visualizations on the page.

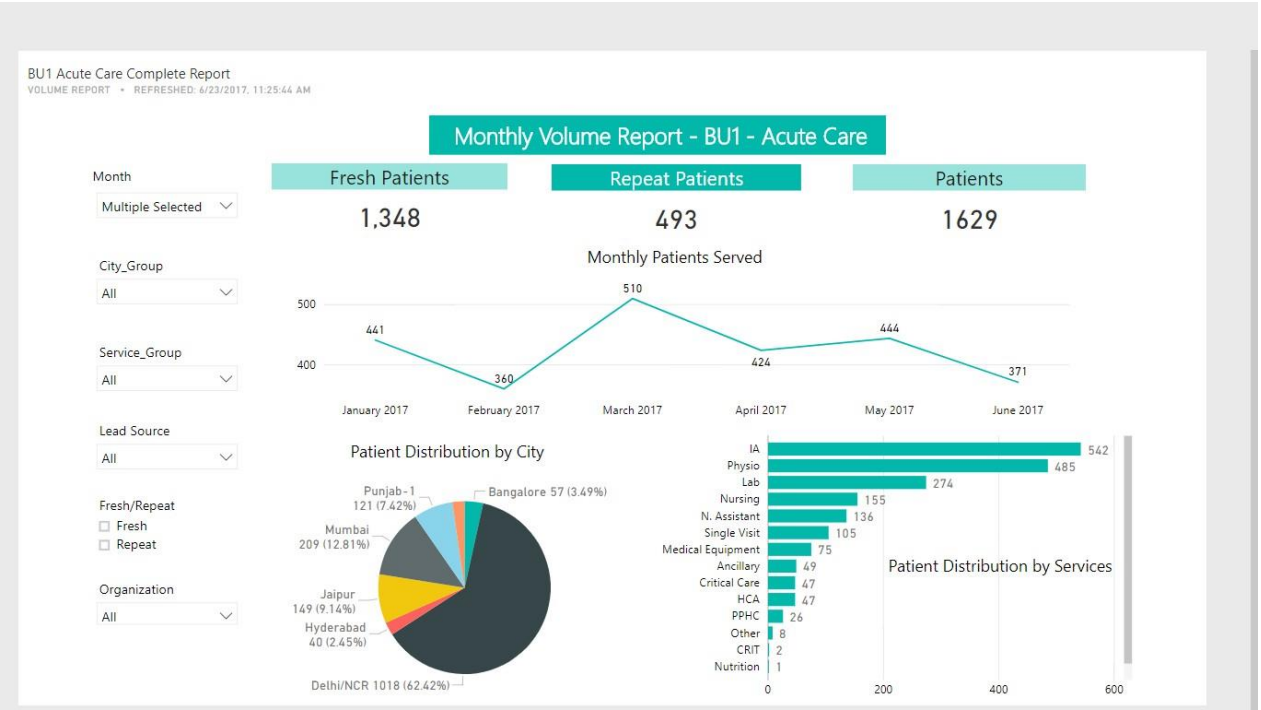
Visual Cards of Revenue, Packages, Patients and Avg. Revenue per Patients are inserted just below the title of the report in order to give user an idea of the important numbers. Card visualizations simply show a numeric representation of a field.

A new measure ‘Revenue per Patient’ was created so that we could know on average how much revenue is coming from a patient.

BU1 Acute Care – Monthly Volume Report

This report gives brief insights about the distribution of patients of Business Unit 1 (BU1) across months, locations and service type.

The design layout of the report is shown below:



Slicers on the left hand panel: Month, City group, Service_group, Fresh/Repeat and Organization.

We created a column named ‘First_creation_date’ which is min (Creation_date) for patients (Ignoring Initial Assessment) . Then we compared First_Creation_date with the Creation_date.

If Creation_date <= First_Creation_date: Patient is marked as a ‘Fresh Patient’.

And if Creation_date > First_Creation_date: Patient is marked as a ‘Repeat Patient’.

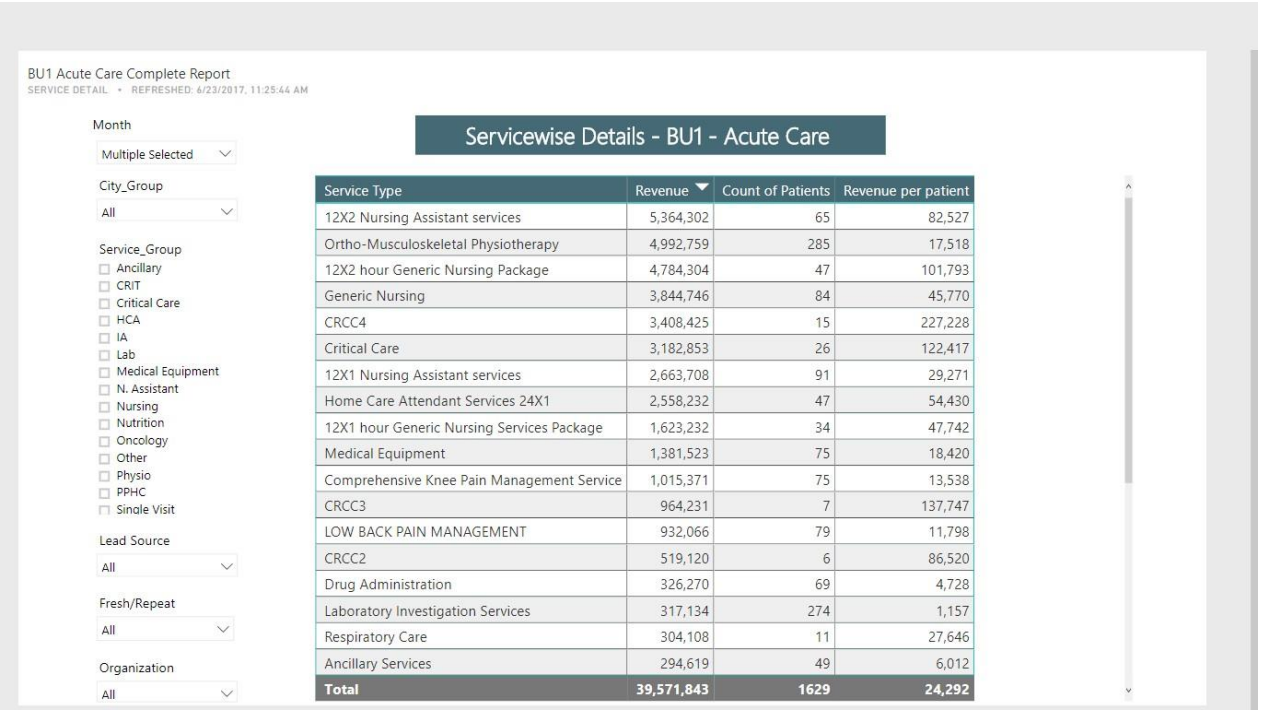
The counts of both fresh patients and repeat patients are represented in card visuals.

NOTE: The sum of fresh and repeat patients is not equal to total patients because repeat patients will be counted more than once as they would appear multiple times in different months.

BU1 Acute Care – Service wise Details

This report shows a table visualization depicting the revenue, no of patients and avg. revenue per patient of various service types.

The design layout of the report is shown below:



Service Type	Revenue	Count of Patients	Revenue per patient
12X2 Nursing Assistant services	5,364,302	65	82,527
Ortho-Musculoskeletal Physiotherapy	4,992,759	285	17,518
12X2 hour Generic Nursing Package	4,784,304	47	101,793
Generic Nursing	3,844,746	84	45,770
CRCC4	3,408,425	15	227,228
Critical Care	3,182,853	26	122,417
12X1 Nursing Assistant services	2,663,708	91	29,271
Home Care Attendant Services 24X1	2,558,232	47	54,430
12X1 hour Generic Nursing Services Package	1,623,232	34	47,742
Medical Equipment	1,381,523	75	18,420
Comprehensive Knee Pain Management Service	1,015,371	75	13,538
CRCC3	964,231	7	137,747
LOW BACK PAIN MANAGEMENT	932,066	79	11,798
CRCC2	519,120	6	86,520
Drug Administration	326,270	69	4,728
Laboratory Investigation Services	317,134	274	1,157
Respiratory Care	304,108	11	27,646
Ancillary Services	294,619	49	6,012
Total	**39,571,843**	**1629**	**24,292**

Various slicers like of month, City group, Service_group, Lead source, Fresh/Repeat and Organization are added on the left hand side panel which allows to user to narrow down the portion of the dataset shown in the other visualizations on the page.

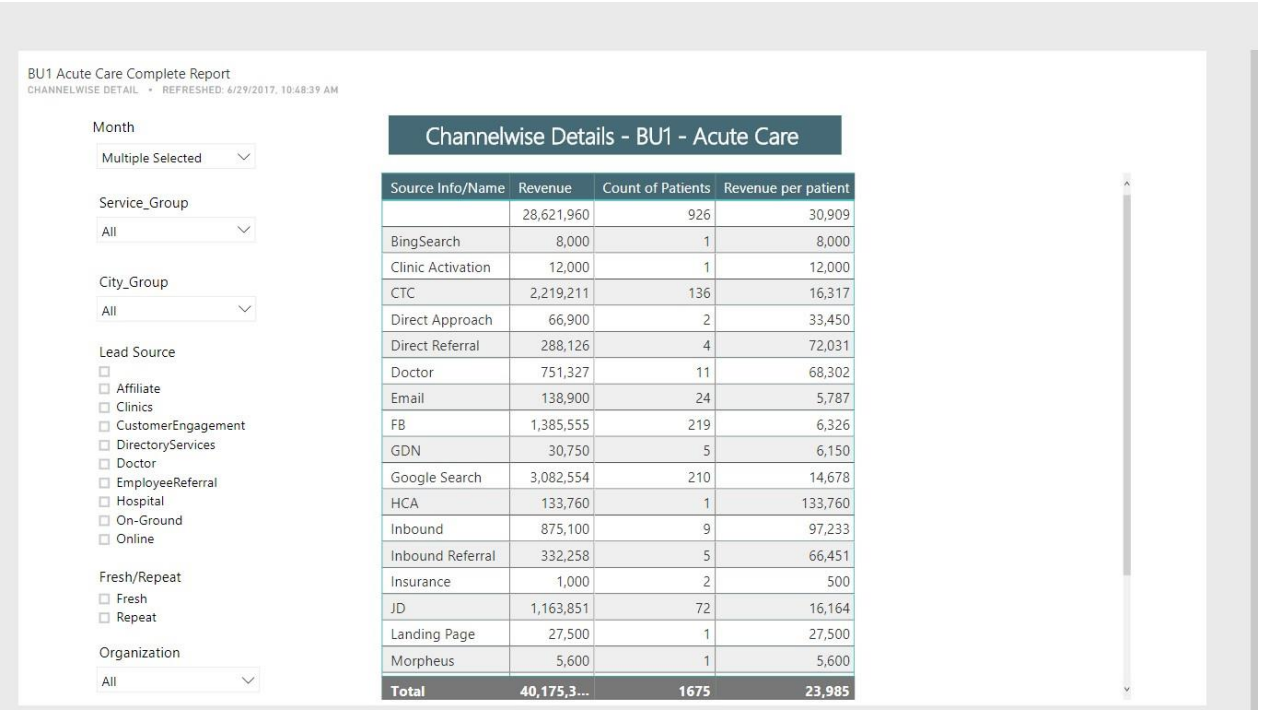
Every service group has some service types in it so we have listed all the service groups on the left hand panel so that on selecting a particular service group we'll be able to see records of all the service types associated with it.

A row of total is also added at the bottom of the table to give user an overall performance overview of the different service types.

BU1 Acute Care – Channel wise Details

This report shows a table visualization depicting the revenue, no of patients and avg. revenue per patient of various channels from which leads are captured.

The design layout of the report is shown below:



Source Info/Name	Revenue	Count of Patients	Revenue per patient
	28,621,960	926	30,909
BingSearch	8,000	1	8,000
Clinic Activation	12,000	1	12,000
CTC	2,219,211	136	16,317
Direct Approach	66,900	2	33,450
Direct Referral	288,126	4	72,031
Doctor	751,327	11	68,302
Email	138,900	24	5,787
FB	1,385,555	219	6,326
GDN	30,750	5	6,150
Google Search	3,082,554	210	14,678
HCA	133,760	1	133,760
Inbound	875,100	9	97,233
Inbound Referral	332,258	5	66,451
Insurance	1,000	2	500
JD	1,163,851	72	16,164
Landing Page	27,500	1	27,500
Morpheus	5,600	1	5,600
Total	**40,175,3...**	**1675**	**23,985**

Various slicers like of month, City group, Service_group, Lead source, Fresh/Repeat and Organization are added on the left hand side panel which allows to user to narrow down the portion of the dataset shown in the other visualizations on the page.

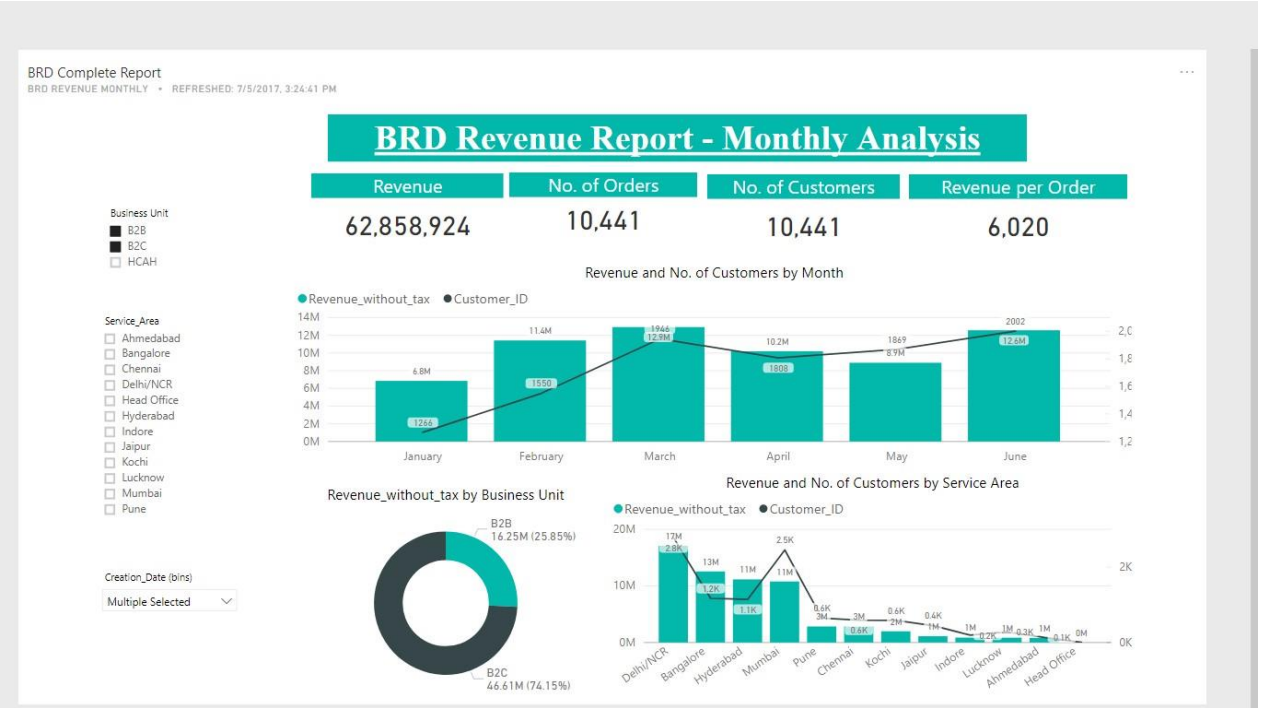
Every lead source has some source info/name in it so we have listed all the lead sources on the left hand panel so that on selecting a particular lead source we'll be able to see records of all the source names associated with it.

A row of total is also added at the bottom of the table to give user an overall performance overview of the different lead sources.

BRD – Monthly Revenue Report

This report gives brief insights about the monthly trends of revenue generated by Burman Retails Distribution (BRD) across various locations and service type.

The design layout of the report is shown below:



Slicers on the left hand panel: Creation Date, Service Area and Business Unit

Card Visualizations:

Revenue: It represents the total revenue generated (without tax).
No. of Orders: It represents the total number of orders placed.
No of Customers: It represents the total number of customers catered.

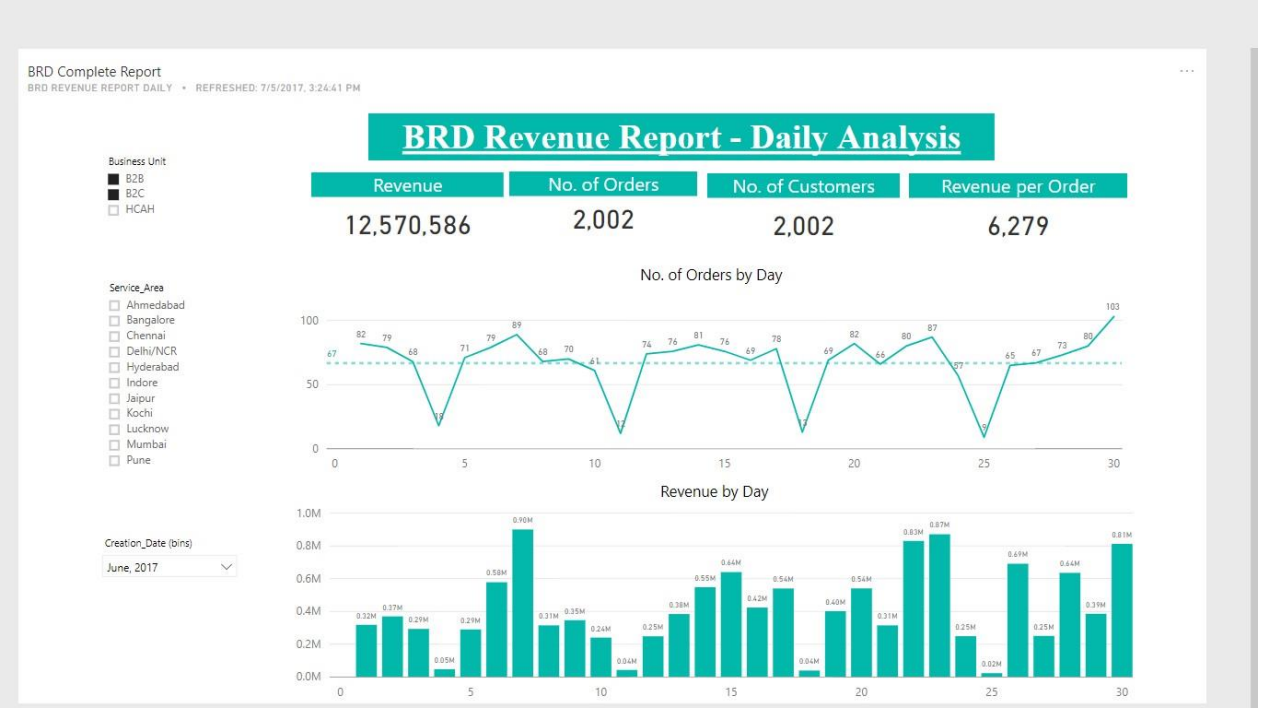
Revenue per Order: It represents the average revenue generated per order.

Note: All the revenues mentioned in the report are without taxes

BRD – Daily Revenue Report

This report gives brief insights about the daily trends of revenue generated by Burman Retails Distribution (BRD) across various locations and service type.

The design layout of the report is shown below:



Slicers on the left hand panel: Creation Date, Service Area and Business Unit

Card Visualizations:

Revenue: It represents the total revenue generated (without tax).
No. of Orders: It represents the total number of orders placed.
No of Customers: It represents the total number of customers catered.

Revenue per Order: It represents the average revenue generated per order.

Note: All the revenues mentioned in the report are without taxes

BRD – Manufacturer Details

This report gives brief insights about the daily trends of revenue generated by Burman Retails Distribution (BRD) across various locations and service type.

The design layout of the report is shown below:

A new table named Manufacturer Lookup was created to group a bucket of manufacturers into a group

Slicers on the left hand panel: Creation Date, Service Area and Business Unit

Card Visualizations:

Revenue: It represents the total revenue generated (without tax)
No. of Orders: It represents the total number of orders places
No of Manufacturers: It represents the total number of Manufacturers during a particular period of time

Note: All the revenues mentioned in the report are without taxes

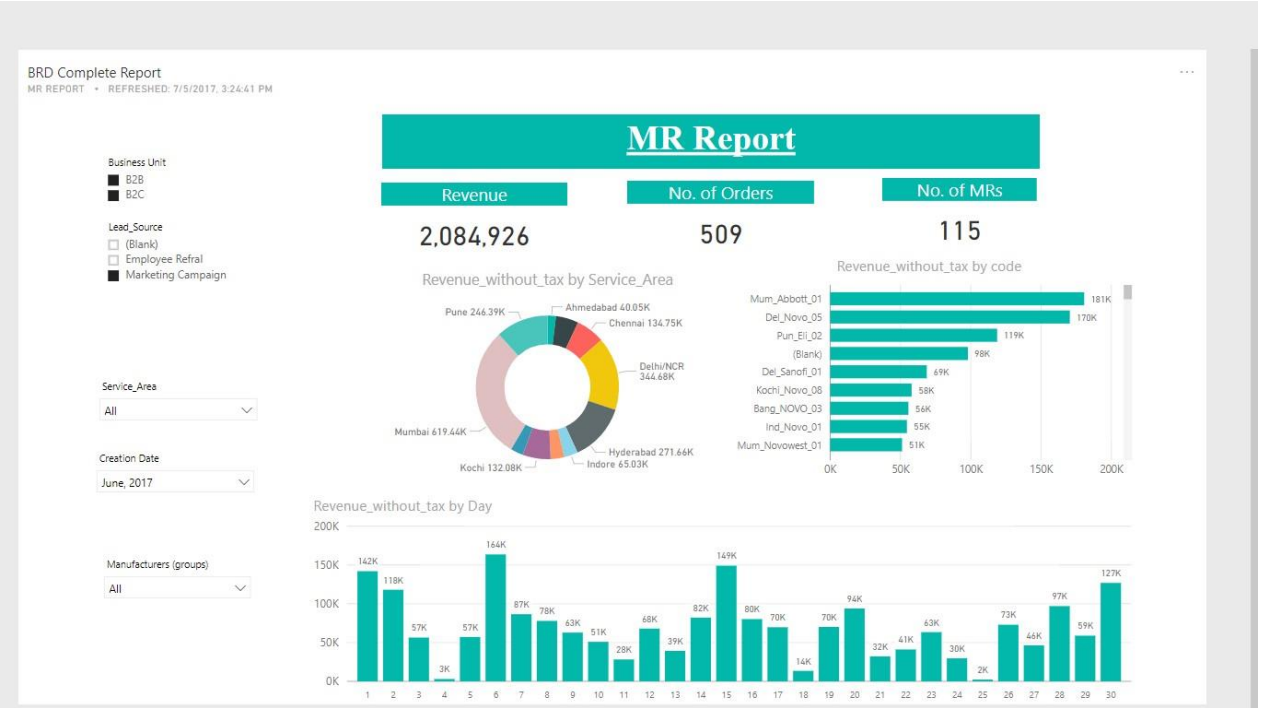
SPRINT-2

REPORT	TABLE USED	PAGE NO
MR Detail	*MR Table*	17
Reversals	*Transaction_snapshot*	18-19
Discounts	*Transaction_snapshot*	20-21
Outstanding Report	*Billing_snapshot*	22
Planned Revenue	*Lead_details*	23-24
Lead Detail Report	*Lead_details*	25-26
Diabee - Leads Conversion	*Lead_details*	27-28
Daily revenue & vol. Report	*Billing_3*	29

MR Detail Report

This report gives brief insights about the daily trends of revenue generated by Burman Retails Distribution (BRD) across various locations and by different MR.

The design layout of the report is shown below:



A new table named MR Lookup was created to group a bucket of MRs into a group

Slicers on the left hand panel: Creation Date, Service Area, Lead Source, Manufactures groups and Business Unit

Card Visualizations:

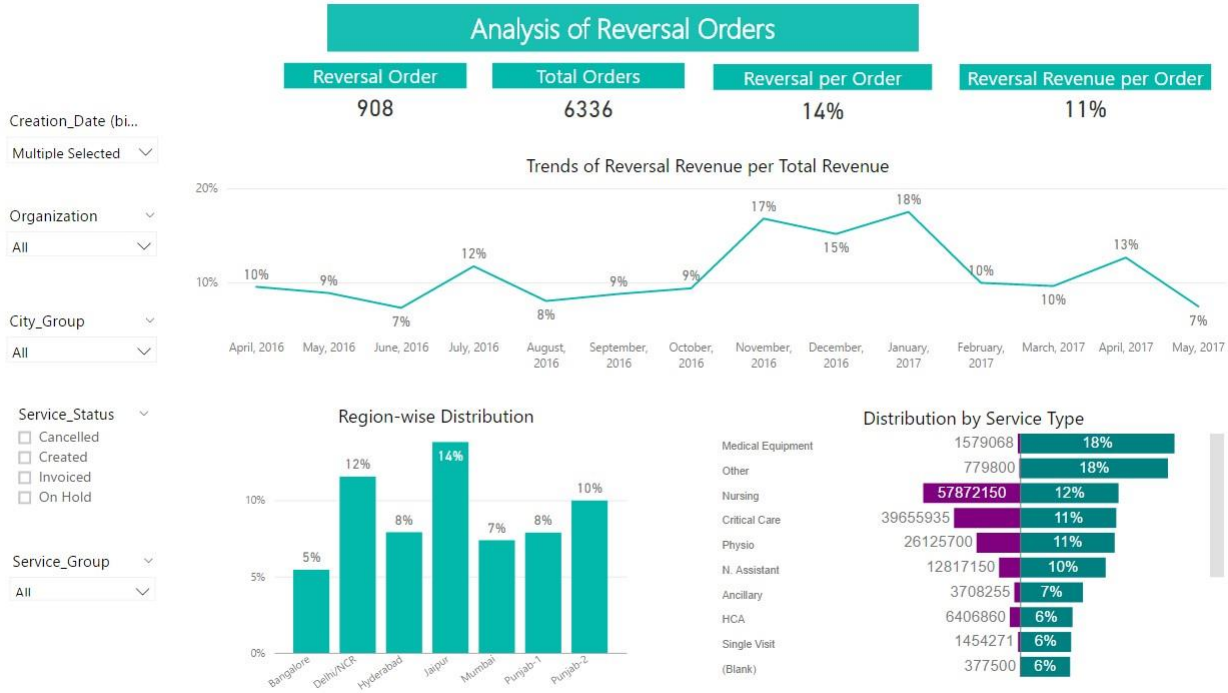
Revenue: It represents the total revenue generated (without tax)
No. of Orders: It represents the total number of orders places
No of MRs: It represents the total number of Medical Representatives during a particular period of time

Note: All the revenues mentioned in the report are without taxes

Reversal Report

This report gives brief insights about the orders reversed; classifying them based on their type, the revenue they could generate and the region the orders belonged to.

The design layout of the report is shown below:



Slicers on the left hand panel: Creation Date of Order, Organization, City group, Service status and Service Group.

Tornado Visualization: The visualization on lower right corner is called “Tornado Chart”. Right half of the graph represents the percentage revenue of orders reversed while the left half represents the total number of orders. Right and left halves have different scales. This chart thus gives a comparative study of two different measures

Card Visualizations:

1. Reversal Orders: It represents the orders reversed during a particular time frame.
2. Total Orders: It represents the total number of orders placed.
3. Reversal per Order: It represents the percentage of orders reversed to the total number of orders. It is calculated as (Orders Reversed/Package+Add on)
4. Reversal Revenue per Order: It represents the percentage of revenue reversed to the total revenue. It is calculated as (Revenue of Reversed Orders/Total Revenue of package and add on).

In the chart of ‘Trends of reversal revenue per total revenue’ visualization a ‘drilldown’ button is provided on the right top of the tile which allows the user to drill through the

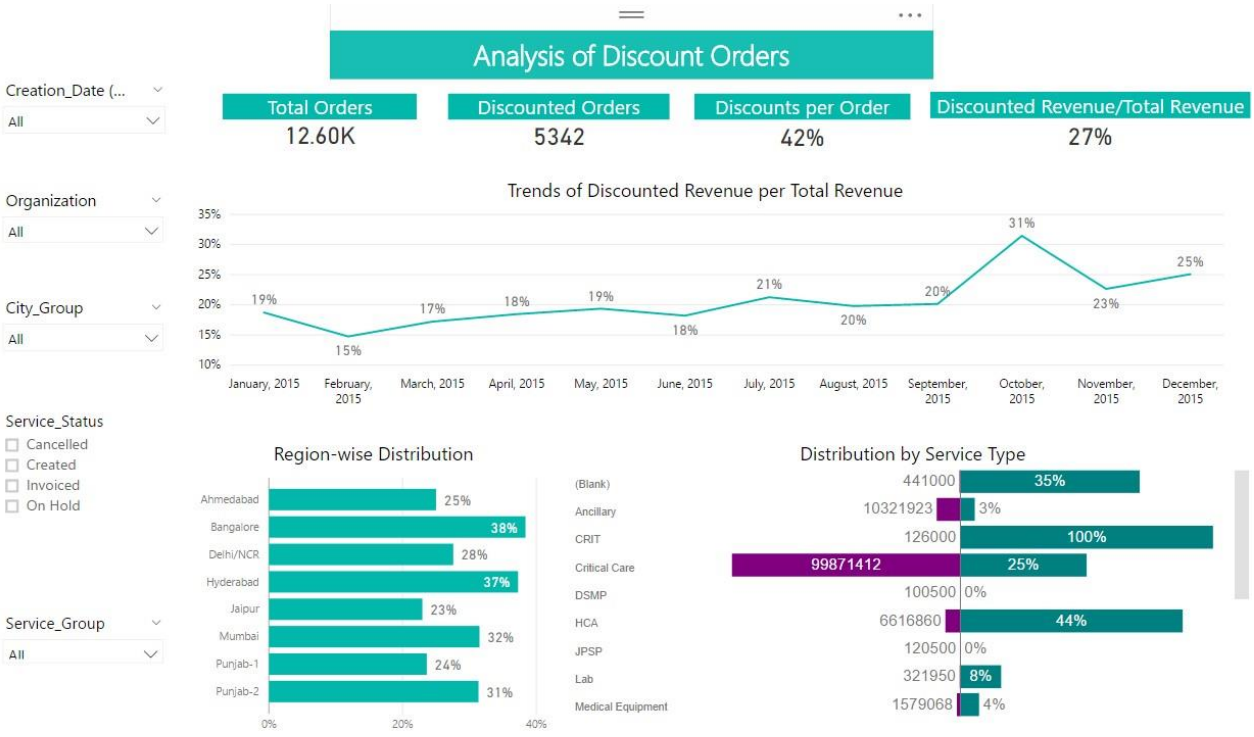
hierarchy of month to day by switching the drilldown option ON. We can then easily visualize month wise as well as day-wise trend.

NOTE: The drilldown option of any visual will only work when turned ON otherwise that visual would also work like any other normal visual tile.

Discount Report

This report gives brief insights about the orders discounted; classifying them based on their type, the revenue they could generate and the region the orders belonged to.

The design layout of the report is shown below:



Slicers on the left hand panel: Creation Date of Order, Organization, City group, Service status and Service Group.

Tornado Visualization: The visualization on lower right corner is called “Tornado Chart”. Right half of the graph represents the percentage revenue of outstanding orders while the left half represents the total number of orders. Right and left halves have different scales. This chart thus gives a comparative study of two different measures

Card Visualizations:

1. Discounted Orders: It represents the orders on which discounts of any amount were provided during a particular time frame.
2. Total Orders: It represents the total number of orders placed.
3. Discounts per Order: It represents the percentage of orders discounted to the total number of orders. It is calculated as (Orders Discounted /Package+Add on)
4. Discounted Revenue per Order: It represents the percentage of revenue discounted to the total revenue. It is calculated as (Revenue of Discounted Orders/Total Revenue of package and add on).

In the chart of ‘Trends of discounted revenue per total revenue’ visualization a ‘drilldown’ button is provided on the right top of the tile which allows the user to drill through the

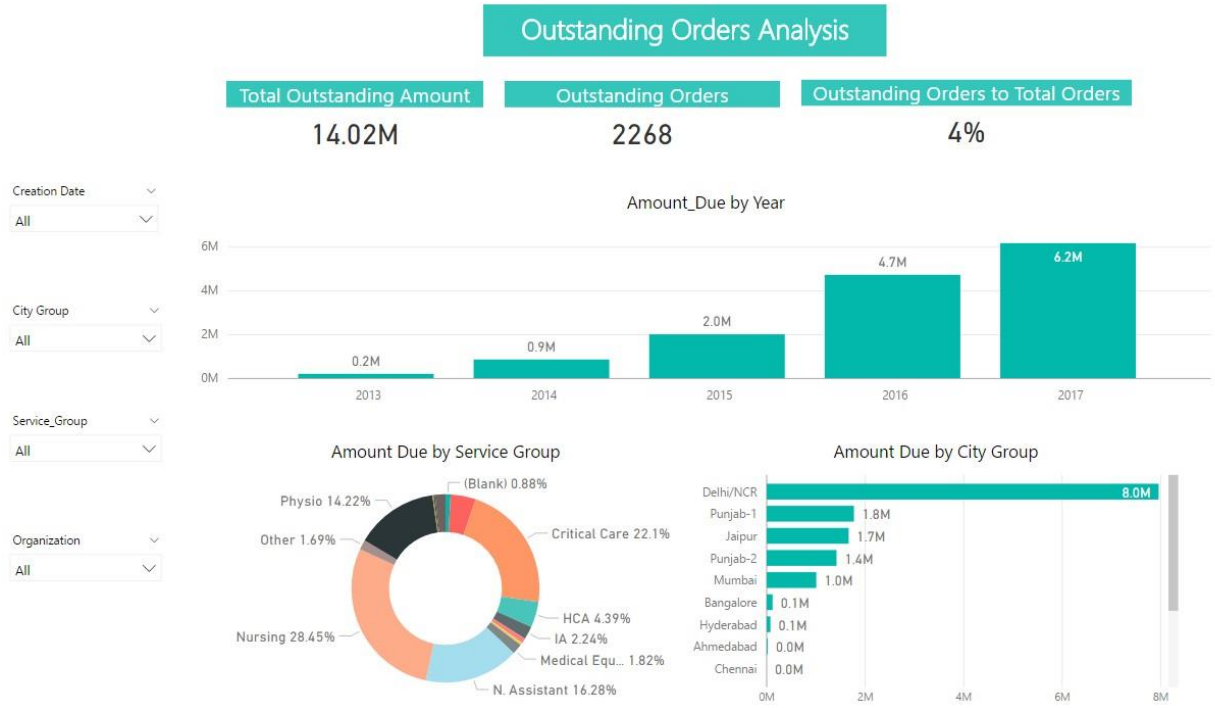
hierarchy of month to day by switching the drilldown option ON. We can then easily visualize month wise as well as day-wise trend.

NOTE: The drilldown option of any visual will only work when turned ON otherwise that visual would also work like any other normal visual tile.

Outstanding Report

This report gives brief insights about the outstanding orders. It throws light upon amounts due along the time axis, the service group to which he outstanding orders belong and their respective cities

The design layout of the report is shown below:



Card Visualizations:

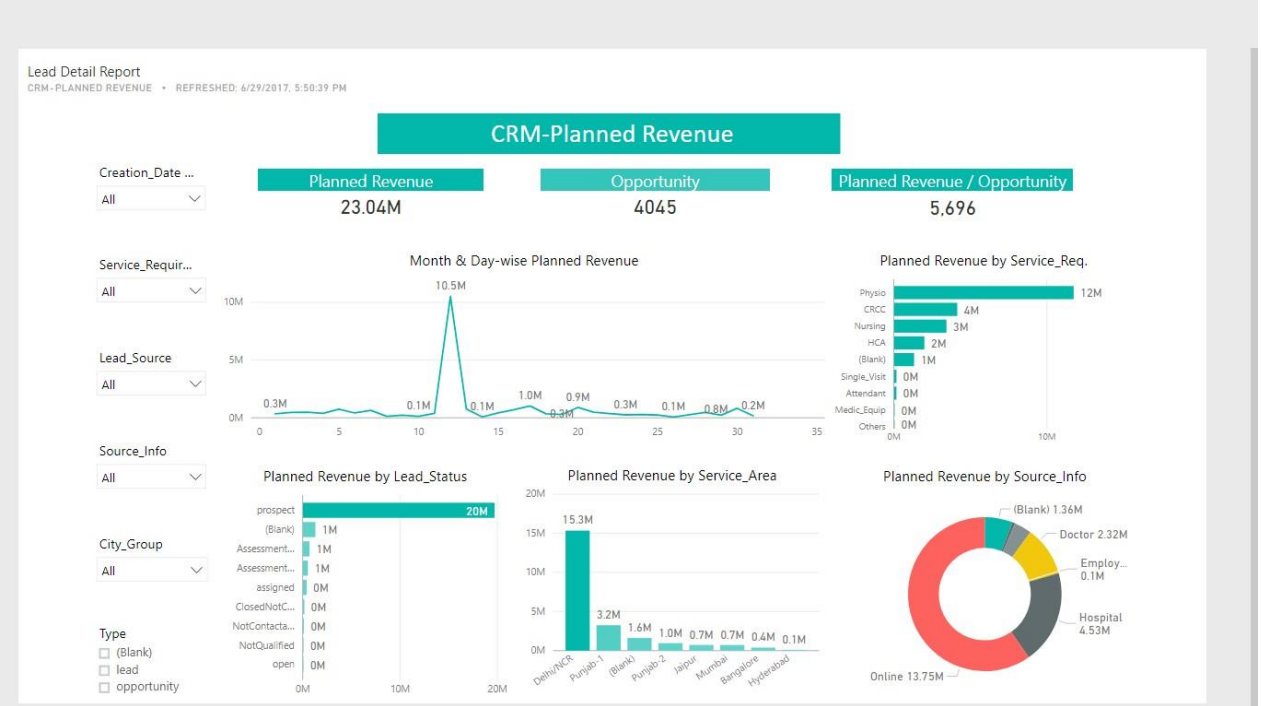
1. Total Outstanding Amount: It represents the total outstanding amount in a given time frame.
2. Outstanding Orders: It represents the total number of outstanding orders.
3. Outstanding Orders to Total Orders: It represents the percentage of outstanding orders to the total number of orders. It is calculated as (Orders Outstanding/Package + Add on)

Drilldown option is provided in the column chart Amount due by year which allows the user to go through the hierarchy of year to month to day by switching drilldown button ON. Also, in the distribution via Service group, drilldown feature is applied which when turned ON shows breakup of service group into various service types associated with it.

Planned Revenue

This report gives brief insights about the planned revenue growth pattern of Business Unit 1 (BU1) across months & days, locations, services, lead status and source of leads.

The design layout of the report is shown below:



Various slicers like of month, Service Requirement, Lead source, Source info, City group and Type are added on the left hand side panel which allows to user to narrow down the portion of the dataset shown in the other visualizations on the page.

Visual Cards of Planned Revenue, Opportunity (Converted Leads) and Planned Revenue per Opportunity are inserted just below the title of the report in order to give user an idea of the important numbers. Card visualizations simply show a numeric representation of a field.

A new measure ‘Planned Revenue / Opportunity’ was created so that we could know on average how much revenue is planned from an opportunity.

In the ‘Month & Day-wise Planned Revenue’ visualization a ‘drilldown’ button is provided on the right top of the tile which allows the user to drill through the hierarchy of month to day by switching the drilldown option ON. We can then easily visualize month wise as well as day-wise planned revenue.

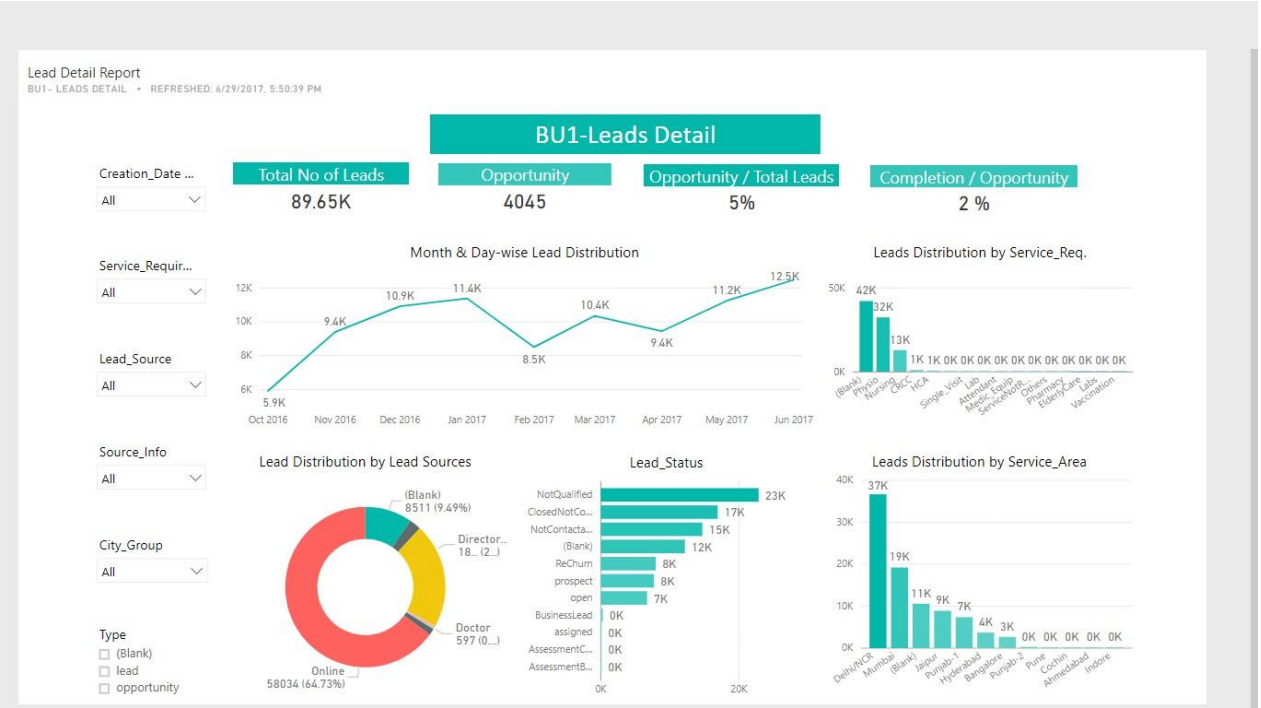
Also, in the distribution via Lead sources, drilldown feature is applied which when switched ON shows the breakup of lead sources into various source names comprised in it. For example: If we turn drilldown ON and click on Online part of the tile it would further break-up to show various sources like Facebook, Google Search, Website, etc.

NOTE: The drilldown option of any visual will only work when turned ON otherwise that visual would also work like any other normal visual tile.

Lead Detail Report

This report gives brief insights about the distribution of leads of Business Unit 1 (BU1) across months & days, locations, services, lead status and source of leads.

The design layout of the report is shown below:



Various slicers like of month, Service Requirement, Lead source, Source info, City group and Type are added on the left hand side panel which allows to user to narrow down the portion of the dataset shown in the other visualizations on the page.

Visual Cards of Total no of leads, Opportunity (Converted Leads) and Opportunity per Total leads and Assessment Completion per Opportunity are inserted just below the title of the report in order to give user an idea of the important numbers. Card visualizations simply show a numeric representation of a field.

New measures ‘Opportunity / Total leads’ and ‘Completion / Opportunity’ were created so that we could know on average how much leads we are converting into opportunity and further how much assessments of those opportunity are being completed .

In the ‘Month & Day-wise Lead distribution’ visualization a ‘drilldown’ button is provided on the right top of the tile which allows the user to drill through the hierarchy of month to day by switching the drilldown option ON. We can then easily visualize month wise as well as day-wise lead number.

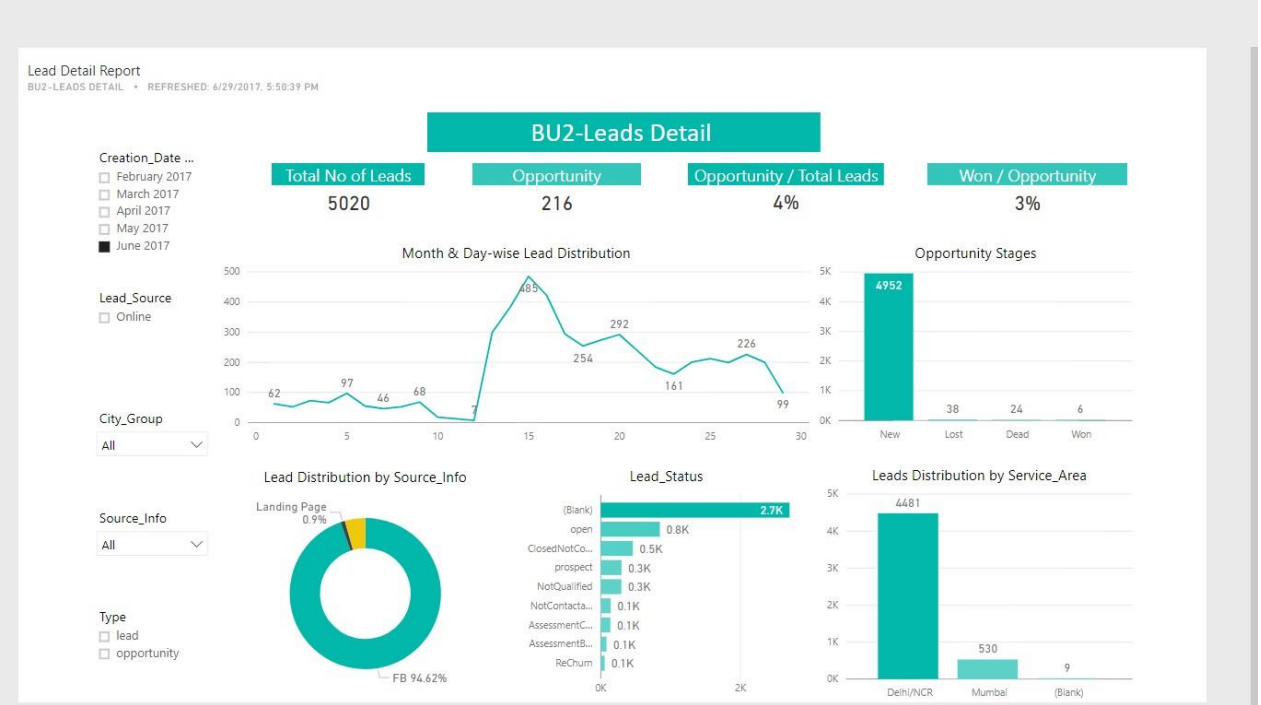
Also, in the distribution via Lead sources, drilldown feature is applied which when switched ON shows the breakup of lead sources into various source names comprised in it. For example: If we turn drilldown ON and click on Online part of the tile it would further break-up to show various sources like Facebook, Google Search, Website, etc.

NOTE: The drilldown option of any visual will only work when turned ON otherwise that visual would also work like any other normal visual tile.

BU2 - Diabee Leads Conversion

This report gives brief insights about the distribution of leads of Business Unit 2 (BU2) across months & days, locations, lead status, Opportunity stages and source of leads.

The design layout of the report is shown below:



Various slicers like of month, Lead source, Source info, City group and Type are added on the left hand side panel which allows to user to narrow down the portion of the dataset shown in the other visualizations on the page.

Visual Cards of Total no of leads, Opportunity (Converted Leads) and Opportunity per Total leads and Won per Opportunity are inserted just below the title of the report in order to give user an idea of the important numbers. Card visualizations simply show a numeric representation of a field.

New measures ‘Opportunity / Total leads’ and ‘Won / Opportunity’ were created so that we could know on average how much leads we are converting into opportunity and further how much of those opportunity are generating revenue for us. (These are marked as ‘WON’ in the opportunity stages)

In the ‘Month & Day-wise Lead distribution’ visualization a ‘drilldown’ button is provided on the right top of the tile which allows the user to drill through the hierarchy of month to day by switching the drilldown option ON. We can then easily visualize month wise as well as day-wise lead number.

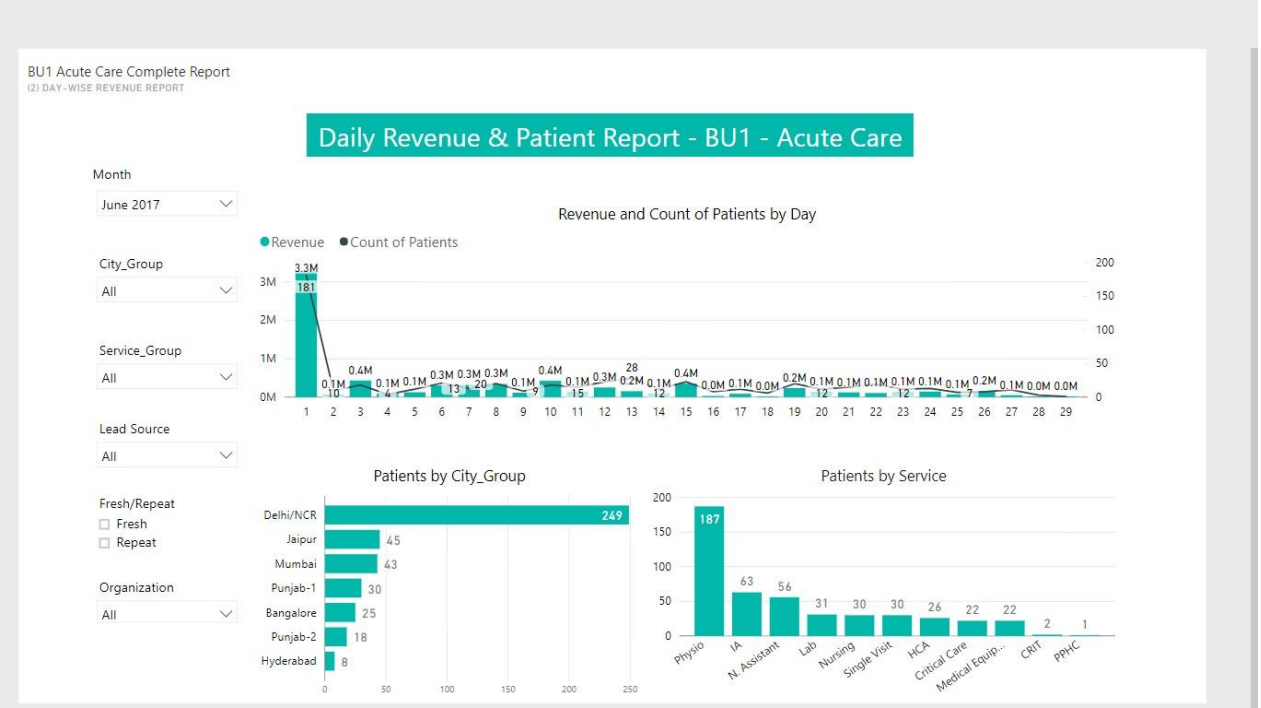
Also, in the distribution via Lead sources, drill down feature is applied which when switched ON shows the breakup of lead sources into various source names comprised in it. For example: If we turn drilldown ON and click on Online part of the tile it would further break-up to show various sources like Facebook, Google Search, Website, etc.

NOTE: The drilldown option of any visual will only work when turned ON otherwise that visual would also work like any other normal visual tile.

Daily Revenue and Volume Report

This report gives brief insights about the revenue and patients volume growth pattern of Business Unit 1 (BU1) across months & days, locations and services.

The design layout of the report is shown below:



Slicers on the left hand panel: Month, City group, Service_group, Lead Source, Fresh/Repeat and Organization.

In this report we used the line and stacked column chart to visualize two measures that have very different scales, such as revenue and patients, as a combination chart that shows a line and a bar with different axis scales.

In this chart, we presented it with a field for Shared Axis (the X-axis), and then values for our two fields (a column and a line) on Y-axis. Revenue is represented by a bar whereas count of patients is represented by a line.

The other two charts simply represent the distribution of no of patients across different city groups and service groups.

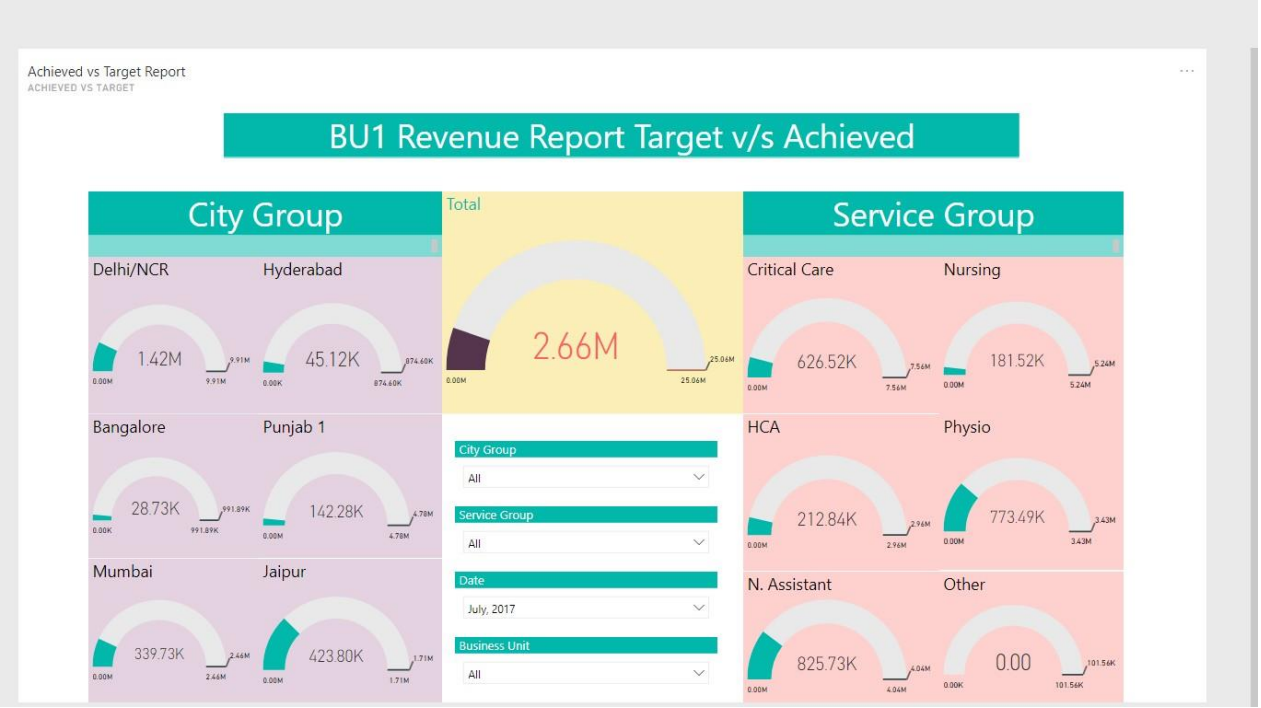
SPRINT-3

Target vs Actual

This report gives brief insights about the revenue achieved versus target of Business Unit 1 (BU1) across months & days, locations and services.

Project Scope and objectives- The main purpose of plotting graph is to infer which service type requires more focus towards achieving target.

The design layout of the report is shown below:



Slicers used: City group, Service_group, Date and Business Unit.

In this report we used the line and gauge chart to visualize achieved v/s target revenue for each city group and service group. Left hand of the panel shows revenue achieved v/s target for each city group and on the other hand for service group (main units). Slicers have been used to view chart for any service group or city group for a particular month.

The maximum value of gauge is found via measure of sum of target and achieved whichever is greater. The black line in the gauge shows the target to be achieved while the filled part of the gauge shows achieved revenue.

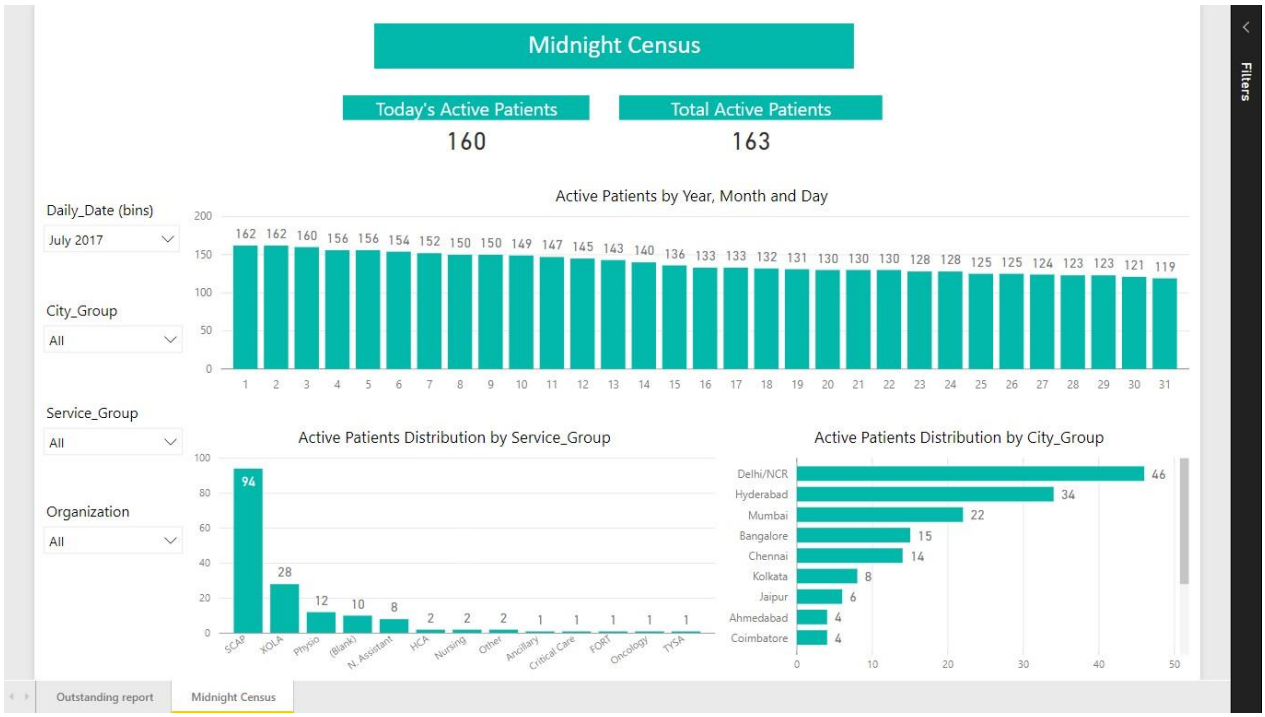
We have data of target till March 2018 which is further fetched in a specified format using Microsoft query and the data for achieved is taken from billing monthly report.

Finally we have appended the billing monthly report data in target data sheet via power bi. Report level filters have been applied to show data for the months whose target is available i.e. Jan 2017 to Mar 2018.

Midnight Census

The main objective of making this report was to give an idea that on a daily basis how much beds are occupied or in other words on a daily basis how much of our patients are active. It gives the active patients count on a yearly, monthly and daily basis. Also, we have made the visuals to provide active patients distribution by City groups and service groups.

The design layout of the report is shown below:



Slicers on the left hand panel: Date, City group, Service_group and Organization.

To check whether a patient is active or not, we check if today's date falls between the packages start date and end date. If it falls in between, then that patient is active on the checked date otherwise it is inactive.

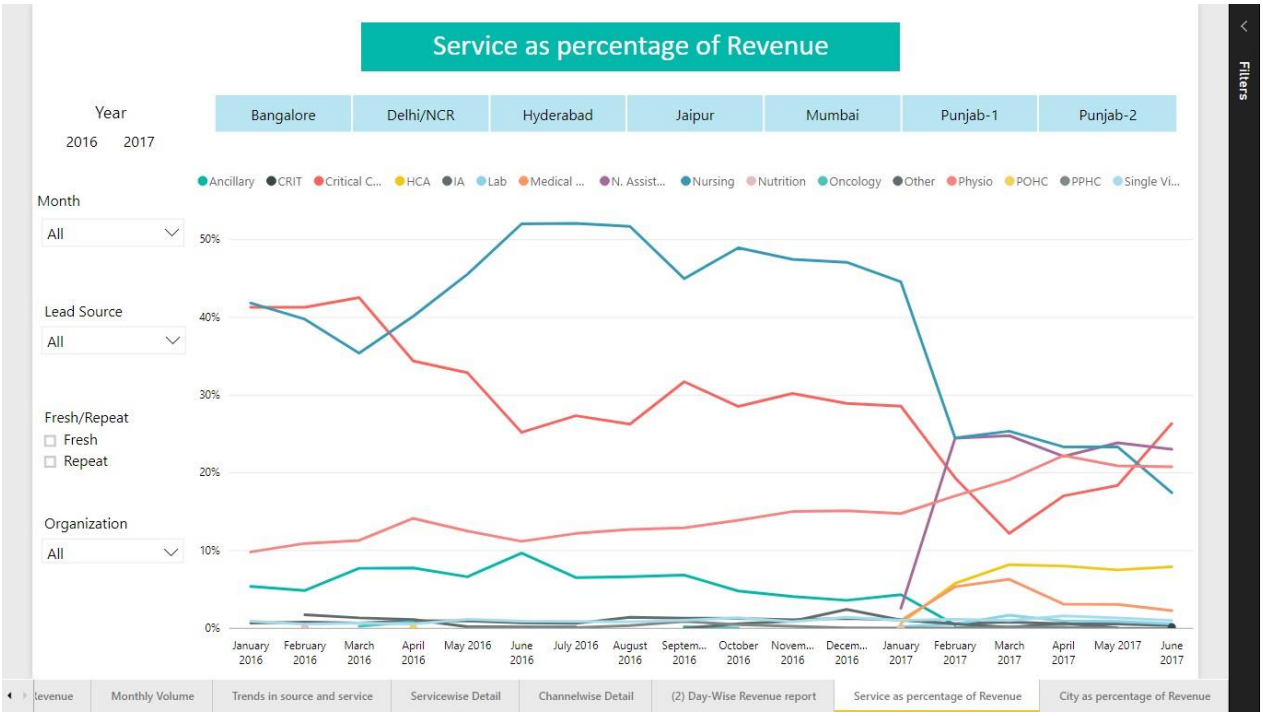
Card Visualizations:

Today's Active Patients: It represents the active patients on today's date. It changes daily as the date changes.
Total Active Patients: It represents the total no of active patients during the timestamp selected from the left hand side month slicer (daily date). If nothing is selected from the slicer by default it will show the total count of active patients across all the months.

Service as % of Revenue

This report gives brief insights about the services and the percentage they contribute to the overall revenue.

The design layout of the report is shown below:



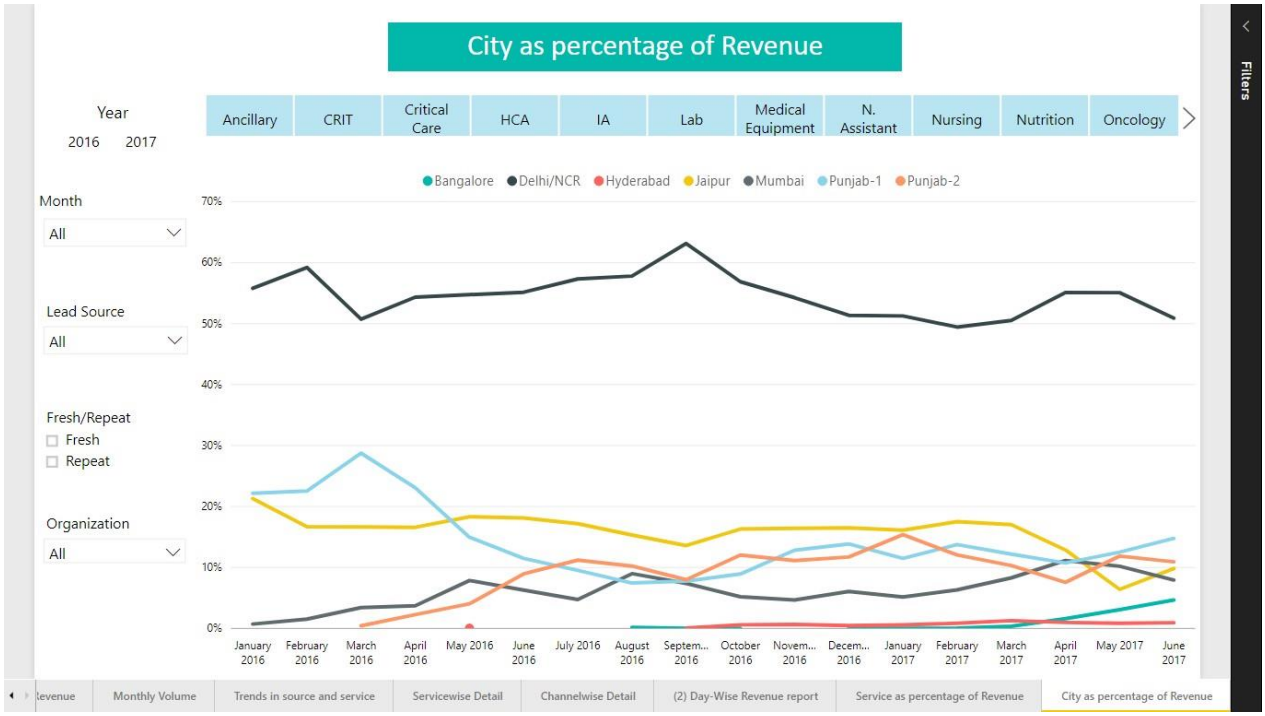
We can further dig inside by using the slicers of month, Lead Source, Fresh/Repeat, Organization (on the left side of the report) and City Group (below the title of report).

The graph shows the trend of various services across the months and percentage of its revenue to the total revenue. Legends are shown on the top of the chart which shows the different services represented by different colors.

City as % of Revenue

This report gives brief insights about the different regions and the percentage they contribute to the overall revenue.

The design layout of the report is shown below:



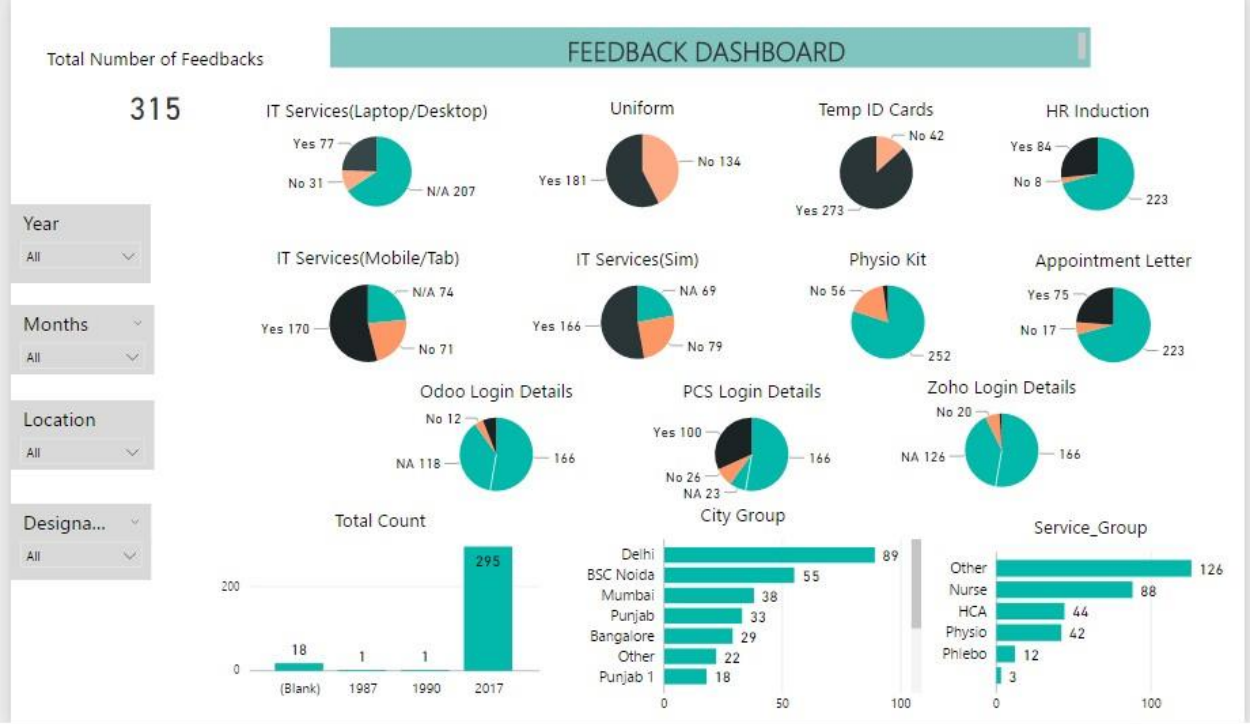
We can further dig inside by using the slicers of month, Lead Source, Fresh/Repeat, Organization (on the left side of the report) and Service Group (below the title of report).

The graph shows the trend of various cities across the months and percentage of its revenue to the total revenue. Legends are shown on the top of the chart which shows the different cities represented by different colors.

HR Feedback Report

This report shows a table visualization depicting the Employee feedback across month, Headquarters, Service group with some Question grouping like IT Services, Uniform allocated, and Temp ID cards allocated.

The design layout of the report is below:



Slicers on the left side are: Year, Months, Location, and Designation.

Card Visualizations:

1. Total Number Of feedbacks till today. It is calculated by counting total numberof names present in the Employee name column.

Pie Visualizations:

1. Has IT services (Mobile/Desktop) offered to the employee on their first day?. It is calculated by counting the No-Yes in the “Did you receive Desktop/Laptop” Column.
2. Does the employee received uniform? It is calculated by counting the No-Yes in the “Did you receive Uniform” Column.
3. Does the employee receive Temp Id Card? It is calculated by counting the No-Yes in the “Did you receive Temp ID cards” Column.
4. Does the employee receive HR Induction? It is calculated by counting the No-Yes in the “Have you undergone HR Induction on Day 1” Column.
5. Has IT services (Mobile/Tab) offered to the employee on their first day? It is calculated by counting the No-Yes in the “Did you receive Mobile/Tab” Column.
6. Does the employee receive Physio Kit? It is calculated by counting the No-Yes in the “Did you get Physio Kit? (Only Applicable to Physio’s)” Column.

7. Has IT services (Sim) offered to the employee on their first day? It is calculated by counting the No-Yes in the “Did you receive SimCard” Column.
8. Does the employee received appointment letter on their first day? It is calculated by counting the No-Yes in the “have you received appointment letter” Column.
9. Has the employee received odoo login on their first day? It is calculated by counting the No-Yes in the “Have you received odoo login details” Column.
10. Has the employee received zoho login on their first day? It is calculated by counting the No-Yes in the “Have you received zoho login details” Column.
11. Has the employee received PCS login on their first day? It is calculated by counting the No-Yes in the “Have you received PCS login details” Column.

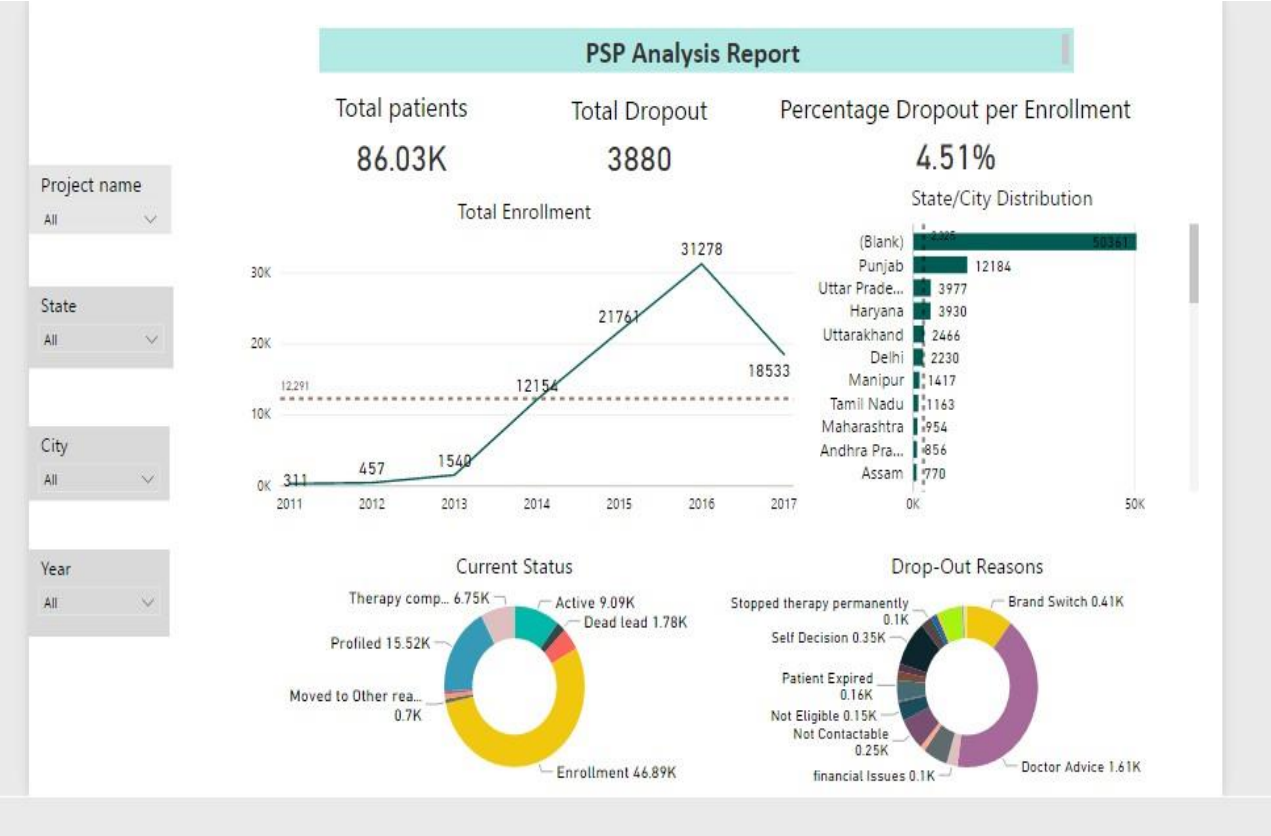
Note: Blank and NA are considered as same in various pie chart visualizations. And some changes are suggested on the product side:

1. Making all the questions as compulsory so that no field should be left blank helping in making data more interpretable.

PSP Analysis Report

This report shows a table visualization depicting the Patient Support Programs (UCBReach, Humrahi, RTH, Hepconnect ...) Enrollment and Dropout across a Year/Month/Region/City.

The design layout of the report is shown below:



Slicers on the left side are: Project Name, State, City, and Year.

Card Visualizations:

1. Total patients in the selected Project across a Year/Month/State/City tillthe last refresh. It is calculated by counting Patient ID from “Patient ID” Column.
2. Total Dropout in the selected Project across a Year/Month/State/City till the last refresh.. It is calculated by counting Dropout from “Current status” Column.
3. Percentage of dropout per lead in the selected Projects across a Year/Month/State/City till the last refresh. It is calculated by creating a measure naming “Percentage dropout” by counting the total Dropout input from “Current status” Column and dividing it with count of Patient ID from “Patient ID” Column.

Pie Visualizations:

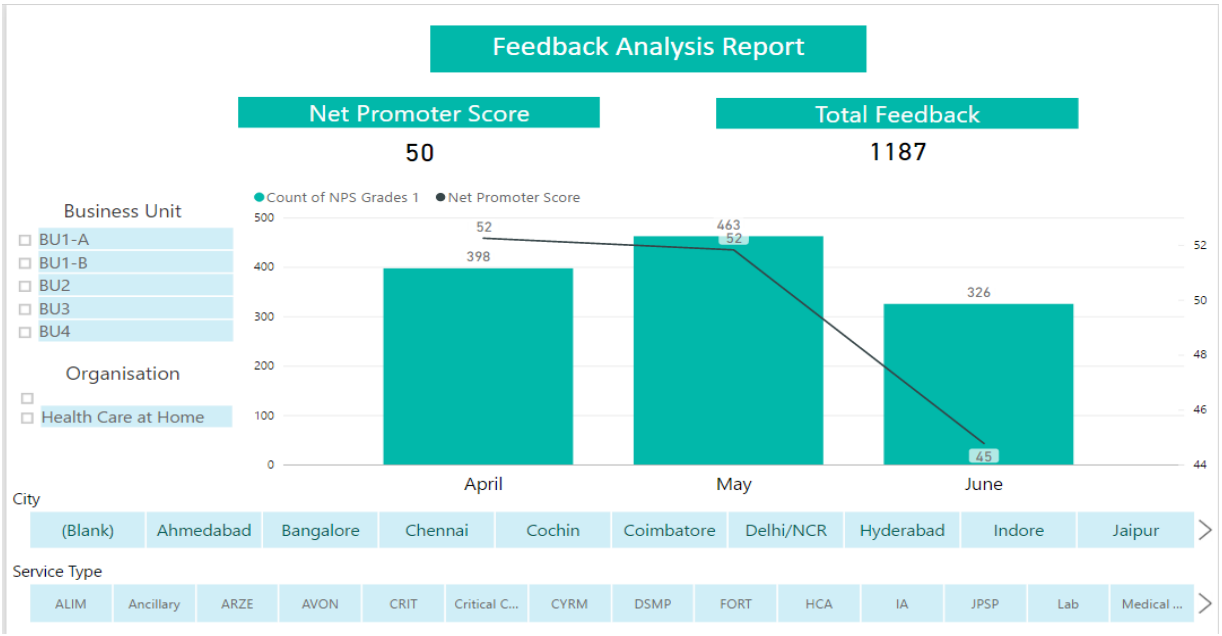
1. Current Status of patients and sub-status in the selected Project across a Year/Month/State/City till the last refresh. It is calculated by counting the number of occurrence of different current status from “Current Status” column with a dropdown having count of different sub-status from “Sub-Status” column with respect to any status.
2. Main Dropout Reasons of patients in the selected Project across a Year/Month/State/City till the last refresh. It is calculated by counting the

occurrence of different sub-status having “Current status” column value as “Dropout” neglecting the NULL value in sub-status.

NPS Dashboard (Feedback)

This report shows Net Promoter Score across months, locations, business units and services using feedbacks taken from patients/customers by CS team via Google forms .

The design layout of the report is shown below:



Slicers used: City group, Service Type ,Organization, Business Units.

Net Promote Score= (Promoters - Detractors/Promoters + Detractors + Passives)

- Promoters- Rating[9-10]
- Passives - Rating[7-8]
- Detractors- Rating[0-6]

In this report we used the line stacked column chart to visualize Net Promoter Score for each month. The column bar shows the total no of feedbacks (i.e. 1187) while the line graph shows NPS value for each month. Slicers have been used so that we can view NPS score for each service type, city group, and organization and business units.

Here we have linked the Google spreadsheet via power BI and report is refreshed automatically using scheduler. We have uploaded the service lookup and city lookup in Google spreadsheet so that we don't have need for a gateway connection as it was a prerequisite for scheduler in power bi for the data files that are not to be refreshed.