



BI infrastructure design & implementation

Nursing care & rehab services provider

Automated and streamlined BI reporting for all line of business and Implemented central data access management to ~700 users , which further saved FTE man-hours costs in BI reporting

Nursing care & rehab services provider company needs top-notch BI infrastructure design & implementation

Picture this...

You're looking for setting up an enterprise data warehouse and develop automated performance dashboards to streamline their BI reporting infrastructure to facilitate tracking of operational performance across different lines of business.

You turn to Accordion.

We partner with your team to automate and streamline BI reporting for all line of business and Implemented central data access management to ~700 users , which further saved FTE man-hours costs in BI reporting, including:

- 1) Analyzing the EMR systems (Point Click Care and Rehab Optima), Accounting system (Great Plains Dynamics), CRM systems (Salesforce, Paycom, Relias and Claim Zone) and Financial system (Great Plains) and other internal data sources to identify the relevant KPIs and cleanse the data.
- 2) Building an Enterprise Datawarehouse (on Microsoft Azure platform) connecting different data sources through data pipelines (in Azure Data Factory) and transformed the raw data as per business requirements
- 3) Developing automated Power BI dashboards on top of the Azure Analysis services to analyze the performance across different LOBs
- 4) Incorporating automated data validation and reconciliation rules at every step across the entire ETL process to ensure accuracy and consistency in data

Your value is enhanced.

You have implemented central data access management to ~700 users and enabled easy distribution of reports to the respective owners with appropriate access controls which further reduced to 50-60 FTE hours on weekly basis. You have implemented an Enterprise Datawarehouse that enables the availability of clean and validated data off the shelf across the company on near real-time basis. You have also integrated and automated BI reporting process including performance dashboards with consistent and accurate performance KPIs across different functions of the business.

KEY RESULT

- ~700 users provided central data access
- 50-60 FTE hours on weekly basis

VALUE LEVERS PULLED

- Lever 1
- Lever 2
- Lever 3

BI infrastructure design and implementation for pe-owned healthcare company

Situation

- Client needed to streamline their BI reporting infrastructure in order to facilitate tracking of operational performance across different lines of business i.e., Institutional Special Needs Plan business (I-SNP) a Medicare Advantage plan, Nurse Practitioner, Skilled nursing facilities (SNFs) and enable addition of other lines of business over time
- Partnered with the client to set up an Enterprise Datawarehouse and develop automated performance dashboards

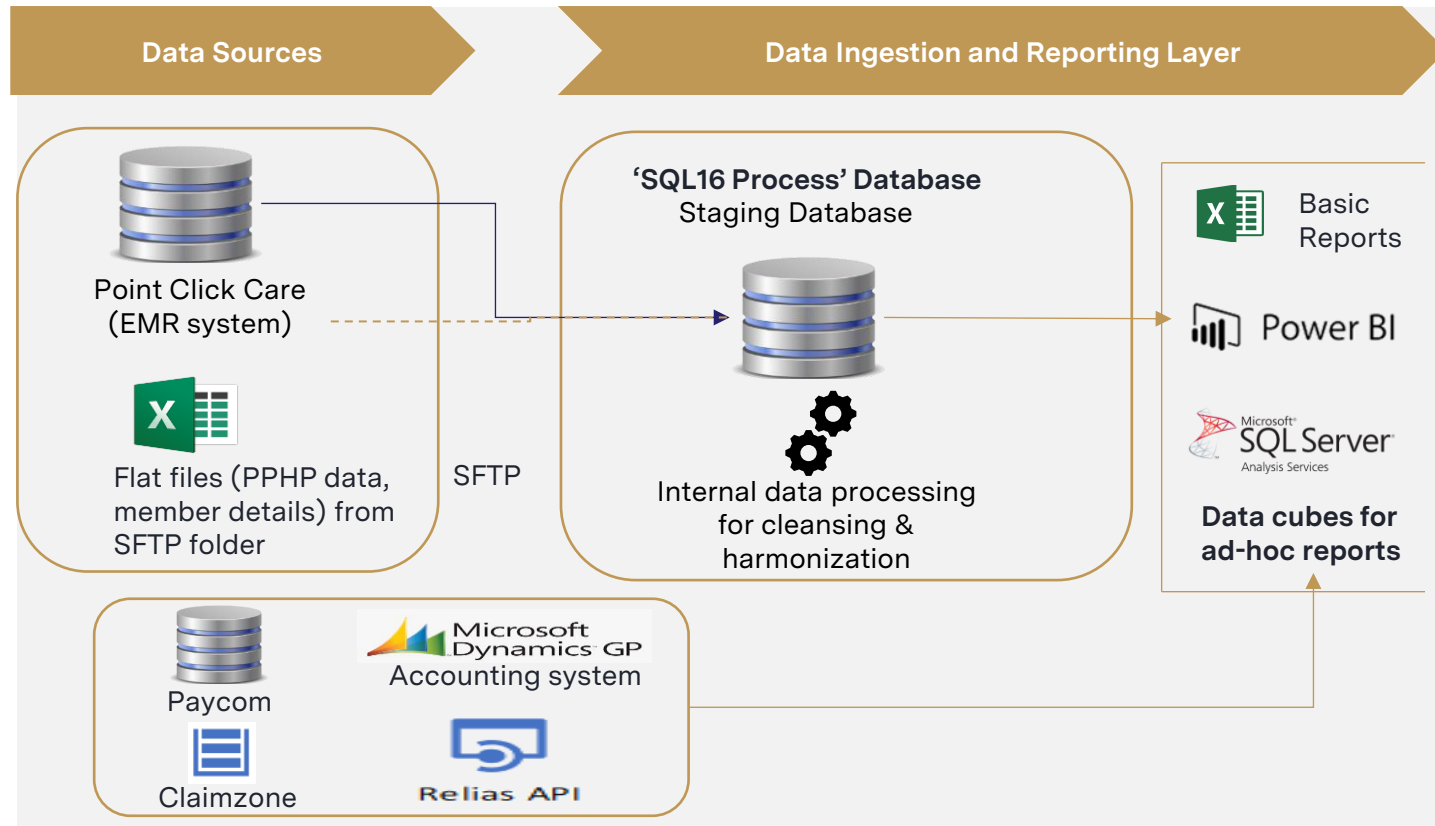
Accordion Value Add

- Analyzed the EMR systems (Point Click Care and Rehab Optima), Accounting system (Great Plains Dynamics), CRM systems (Salesforce, Paycom, Relias and Claim Zone) and Financial system (Great Plains) and other internal data sources to identify the relevant KPIs and cleanse the data.
- Built an Enterprise Datawarehouse (on Microsoft Azure platform) connecting different data sources through data pipelines (in Azure Data Factory) and transformed the raw data as per business requirements
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Impact

- Implemented central data access management to ~700 users and enabled easy distribution of reports to the respective owners with appropriate access controls (e.g., facility managers having access only to their facility data and not other facilities), which further reduced 50-60 FTE hours on weekly basis
- Implemented an Enterprise Datawarehouse that enables the availability of clean and validated data off the shelf across the company on near real-time basis
- Integrated and automated BI reporting process including performance dashboards with consistent and accurate performance KPIs across different functions of the business

Prior BI Architecture



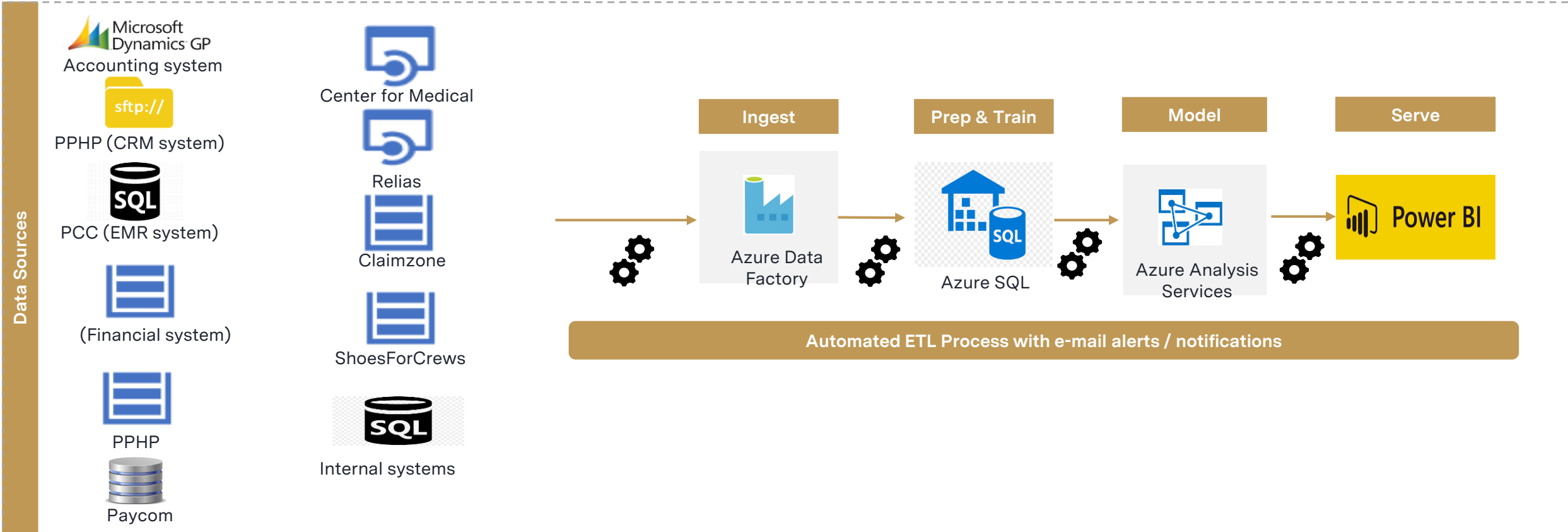
Observations on prior architecture:-

- Loading Labor, PPHP and other data from SFTP folders was a manual and time-consuming process
- File processing was I/O intensive operation and slowed the performance of the system. Also, there was a possibility of files being corrupted in transmission.
- Constrained architecture: cumbersome to add a new data source with different data accessibility method
- Management of data accesses was cumbersome, and it was time consuming to provision new accesses

Data, Reporting and Analytics

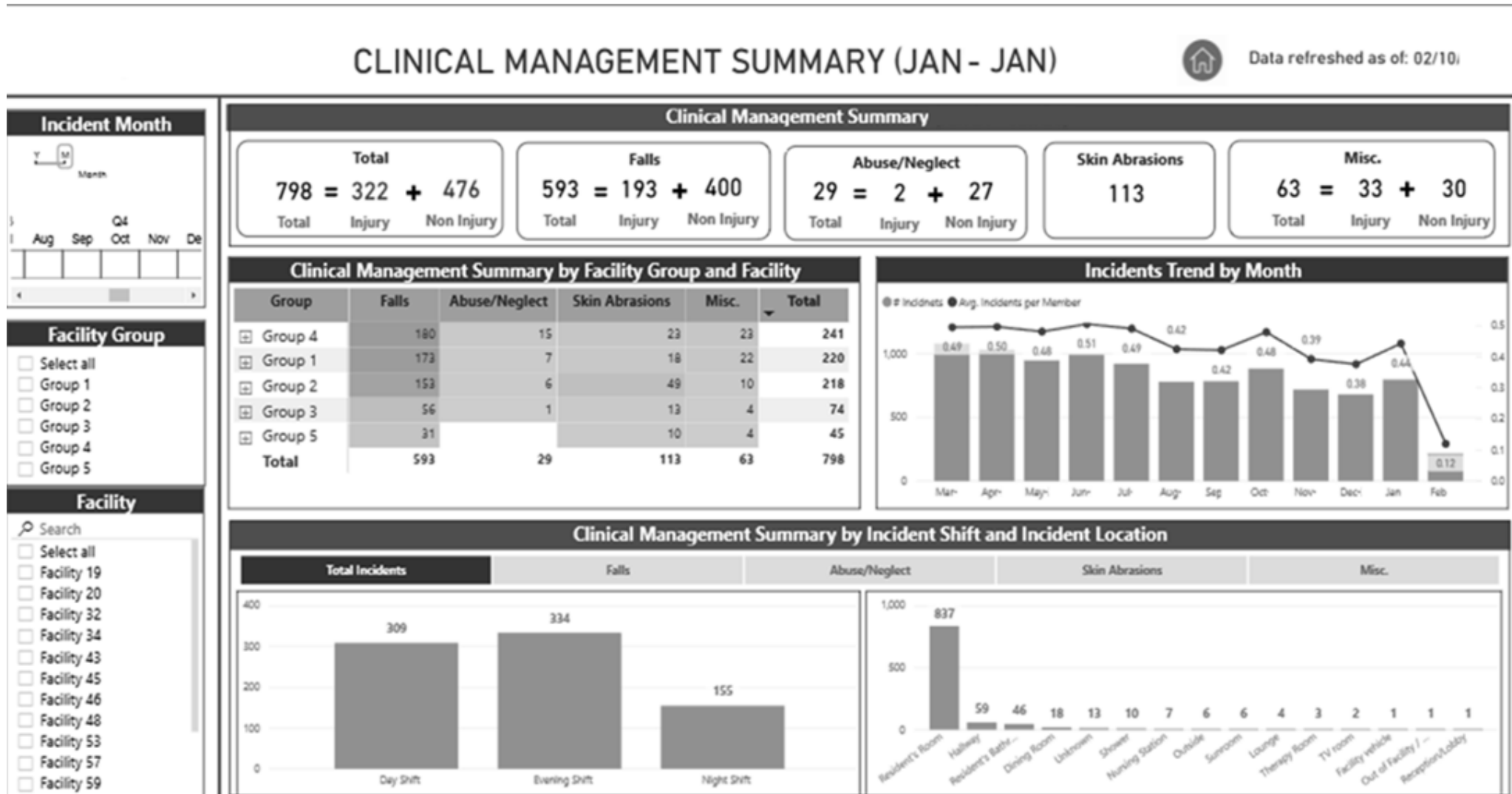
- **Ad-hoc reporting** based on needs from various Teams
- **Lack of central repository** for storing historical data as some reports are directly generated from source systems
- **Lack of consistency of data being utilized by** various teams
- **Lack of consistency and documentation on KPIs**
- **Data distribution** challenges while sharing with facilities (SNFs)

BI infrastructure implementation



- Built an **Enterprise Datawarehouse** connecting different data sources through data pipelines and transformed raw data as per business requirements
- **Developed an automated ETL process** to load the data into **data warehouse** daily and configured e-mail alerts/notifications to monitor the overall ETL process
- Incorporated **automated data validation** and **reconciliation rules** at every step across the entire ETL process to ensure accuracy and consistency in data
- Created a **Tabular data model on Azure Analysis services** and **developed ready-to-serve data marts for analytical and reporting purposes**.
- **Developed Power BI dashboard for I-SNP Line of business and SNF Line of Business** on top of the Analysis services to monitor and track business performance.

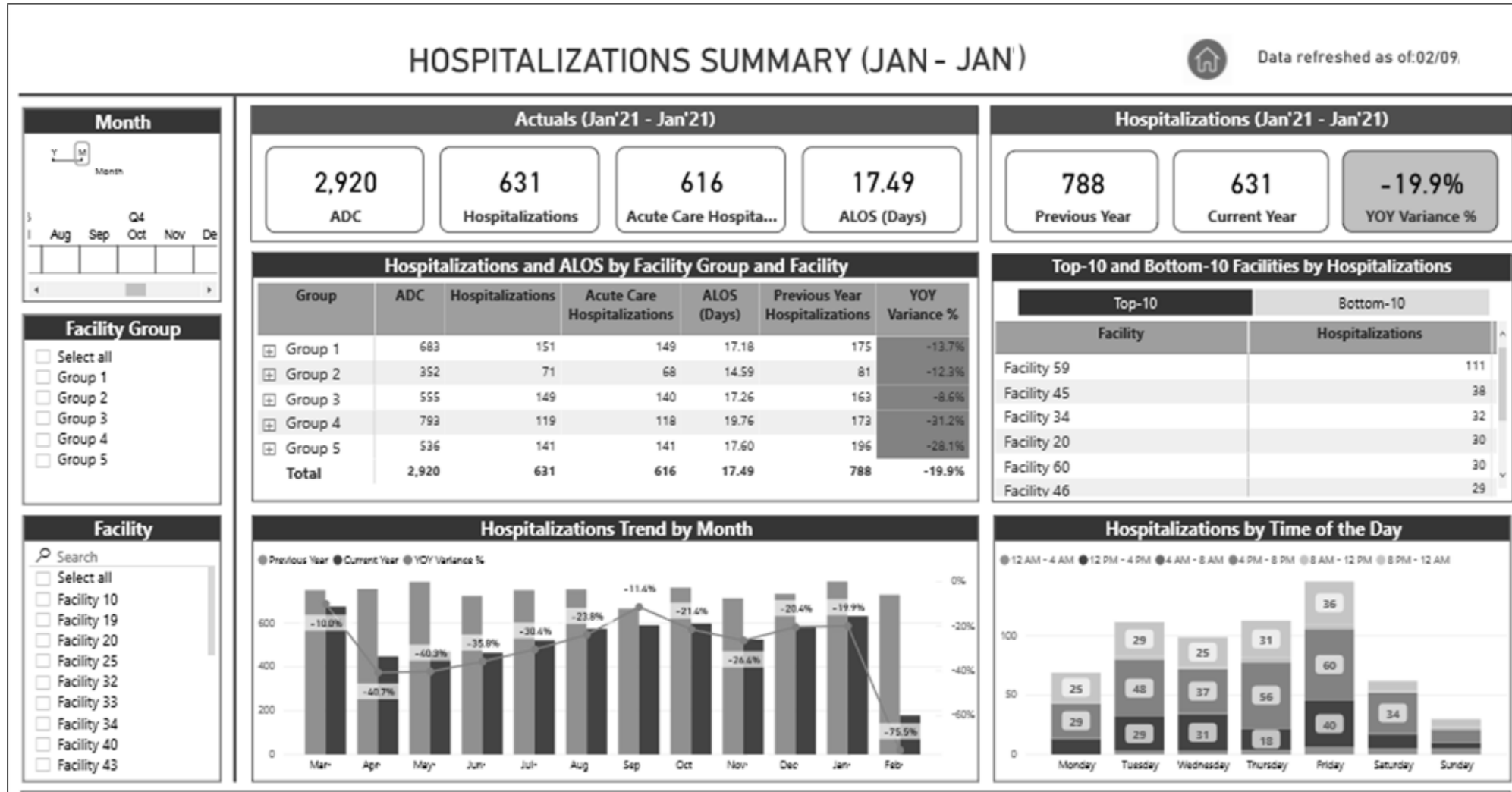
Illustrative dashboard - Clinical management



KPI Trays reporting values for various clinical categories.

Buttons to toggle between different clinical categories for Incident location and Incident shift figures

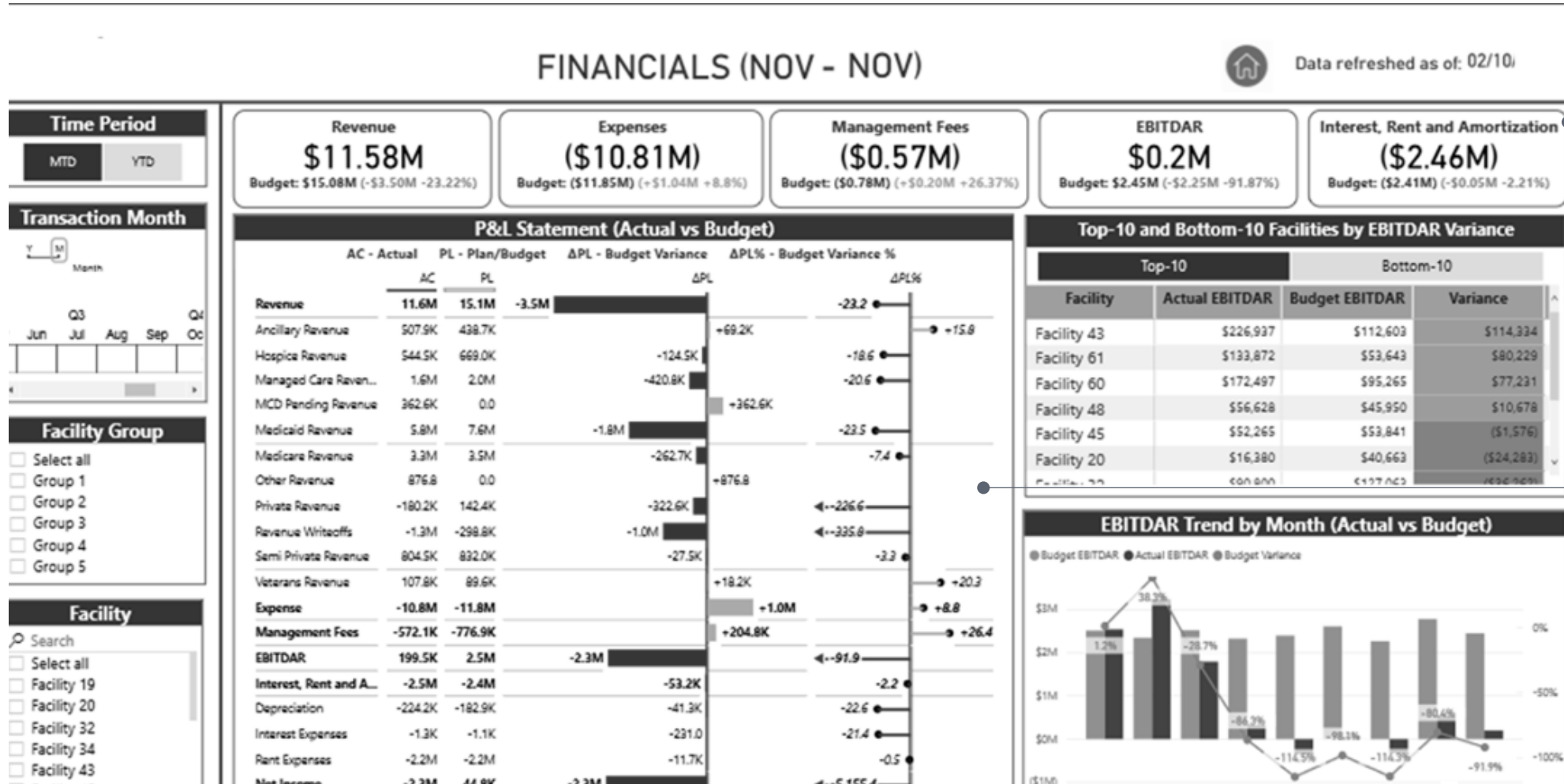
Illustrative dashboard - Hospitalizations



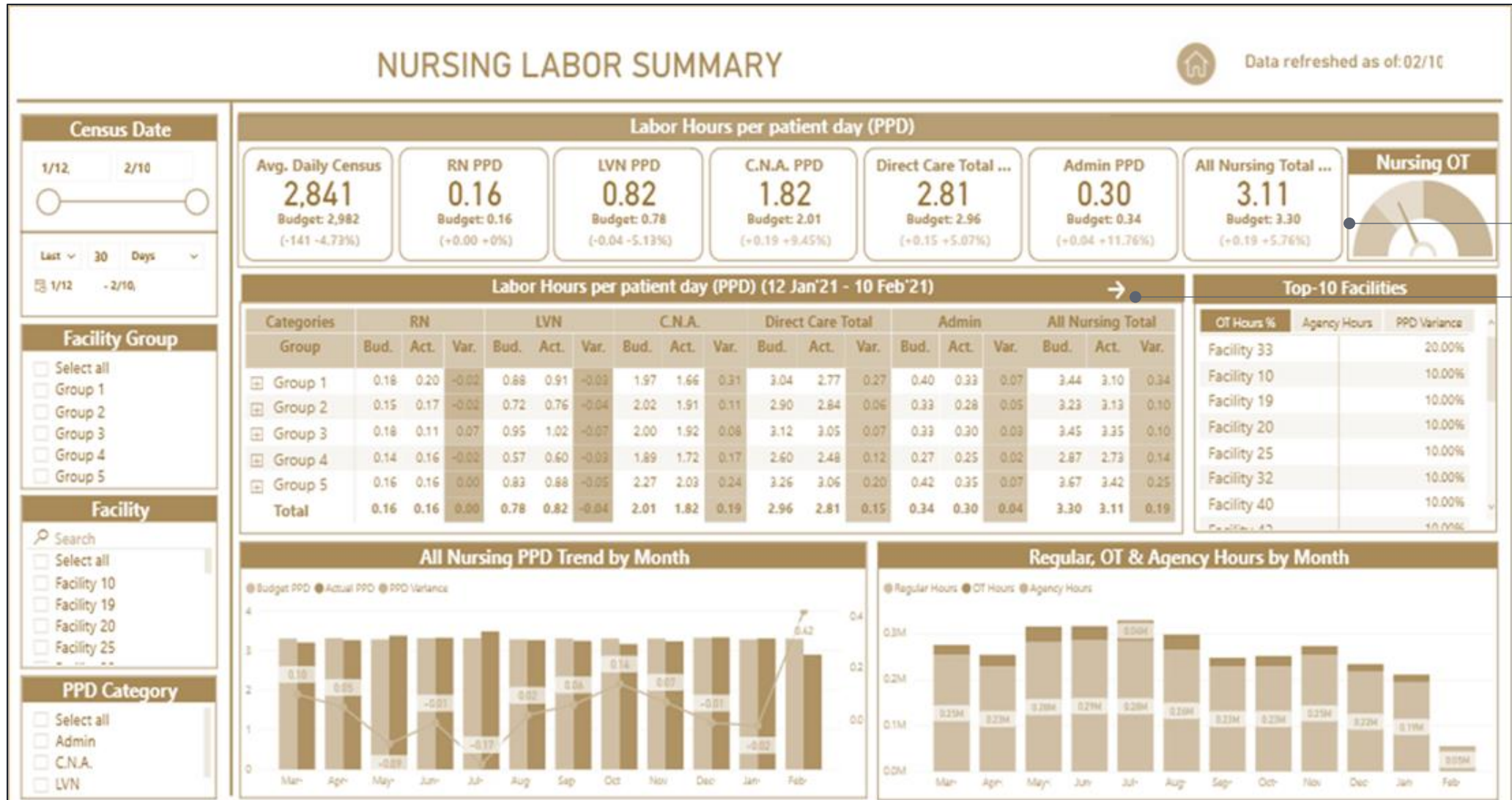
KPI Trays to show key parameters tracking hospitalizations

Buttons to toggle between list of Top 10 and Bottom 10 Facilities by the number of hospitalizations

Illustrative dashboard – Financial summary



Illustrative Dashboard - Ageing Report



KPI showing the actual values along with the budgeted value of the corresponding metric

Arrow button provided on the visual takes to granular level data page at Employee Level.