PBJ Dataset Analysis

This report presents two strategic recommendations for the sales leadership team to enhance market penetration and revenue generation from contracted nurse staffing services. These recommendations are based on an in-depth analysis of the Payroll Based Journal (PBJ) Daily Nurse Staffing data for Q1 2024, focusing on key professional groups and geographic regions.

Key Recommendations:

- Strategize Sales to Target High-Value Providers in Key Regions: Develop a sales strategy that focuses on engaging with providers and facilities within regions identified as high-revenue potential based on contracted labor costs. Prioritizing these areas will maximize Clipboard Health's market penetration and financial returns. Focus recruitment and service packages on Certified Nursing Assistants (CNAs), Licensed Practical Nurses (LPNs), and Registered Nurses (RNs)
- Tailor Recruitment and Service Offerings for Key Professional Categories:
 Concentrate recruitment efforts and customize service packages specifically for Certified Nursing Assistants (CNAs), Licensed Practical Nurses (LPNs), and Registered Nurses (RNs). These roles are crucial to healthcare operations and represent significant segments of the staffing market, thus offering substantial revenue opportunities.

Professionals	Total Contracted Hours	Median Hourly Wage(2023)	Total Labour Cost
CNA	17268942.53	\$18.36	\$317,057,784.85
LPN	8613375.9	\$28.72	\$247,376,155.85
RN	3943621.89	\$41.38	\$163,187,073.81
RN with Administrative Duties	324230.13	N/A	N/A
Med Aide/Technician	296553.51	N/A	N/A
RN Director of Nursing	124692.24	N/A	N/A
LPN with Administrative Duties	101875.22	N/A	N/A
Nurse Aide in Training	83015.73	N/A	N/A
Total	30756307.15	88.46	727621014.5

Table 1.1: Professional and Total Labor Cost Break Down Table

The contracted nursing services market is concentrated around three primary professional groups: Certified Nursing Assistants (CNAs), Licensed Practical Nurses (LPNs), and Registered Nurses (RNs). These groups account for a substantial portion of the labor demand, with CNAs representing 56%, LPNs at 28%, and RNs at 13% of total contracted hours.

According to the Bureau of Labor Statistics, the average national hourly wages for CNAs, LPNs, and RNs are \$18.36, \$28.72, and \$41.38, respectively. This translates to a total labor cost exceeding \$700 million for the analyzed period (Chart 1.1). Assuming a 15% revenue share for contract staffing providers, this results in an estimated market size of \$105 million (Table 1.1).

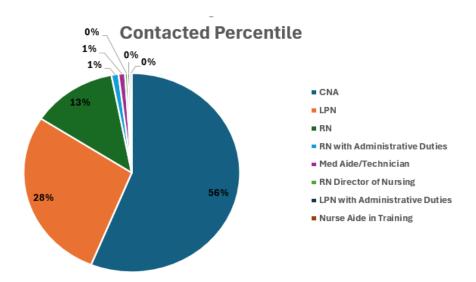


Chart 1.1: Professional Percentile

The demand for contracted nursing services varies significantly across different states. As shown in Chart 1.2, several states demonstrate significantly higher contracted nursing hours compared to others. The top five states—New York (NY), Pennsylvania (PA), New Jersey (NJ), Illinois (IL), and California (CA)—account for 41% of the total contracted hours (Table 1.2).

Based on the analyzed data, healthcare facilities located within these states are deemed high-value targets for the sales leadership team. Due to the substantial volume of contracted hours, these regions are recommended as primary focuses for intensified sales and business development initiatives, as they offer significant market opportunities. A "High-value Provider" is characterized as a facility with a substantial aggregate of total contracted hours. Providers in these regions can be systematically ranked according to their total contracted hours (refer to Table 1.3), facilitating the implementation of sales strategies that specifically target the facilities with the highest demand.

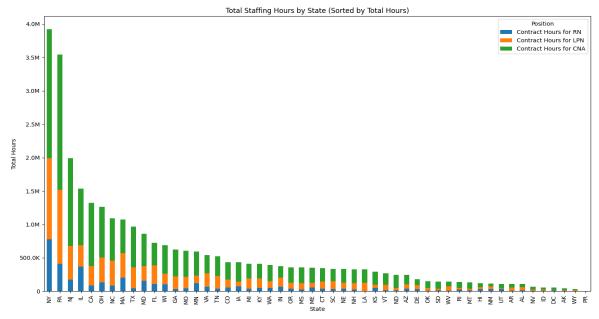


Chart 1.2: Total Staffing Hours by State by Position

This analysis is supported by a supplementary dataset, which includes details such as Provider Name, Total Contracted Hours, and State, intended for further strategic use (the source is detailed in the Dataset section at the conclusion of the analysis).

State	Total_Hours	Percentile
NY	3918247.4	13.1%
PA	3542825.1	11.9%
NJ	1991882.5	6.7%
IL	1533402.8	5.1%
CA	1323705.6	4.4%
Total	12310063.4	0.4

Table 1.2: Total Contracted Hours and Percentile by State

Summary: By focusing on high-demand providers in top-value regions, the sales leadership team can maximize its market impact, leveraging the data to prioritize facilities and regions where contracted nursing services are in greatest demand. This approach will allow for more efficient resource allocation and targeted marketing efforts, ultimately driving revenue growth.

Provider Name	Total Contracted Hour	State
NORTHAMPTON COUNTY-GRACEDALE	82930	PA
PLEASANT ACRES REHABILITATION AND NURSING CENTER	75884	PA
ISABELLA GERIATRIC CENTER INC	75372	NY
QUEENS BOULEVARD EXTENDED CARE FACILITY	70249	NY
BRIGHTON REHABILITATION AND WELLNESS CENTER	67985	PA
MICHIGAN VETERAN HOMES AT GRAND RAPIDS	59804	MI
WORKMENS CIRCLE MULTICARE CENTER	56827	NY
CORAL REEF SUBACUTE CARE CENTER LLC	55289	FL
WILLOW POINT REHABILITATION AND NURSING CENTER	54509	NY
THE PLAZA REHAB AND NURSING CENTER	50030	NY
MENORAH HOME & HOSPITAL FOR AGED & INFIRM	48535	NY
PLEASANT RIDGE MANOR EAST/WEST	48382	PA

Chart 1.3: Sample of Provider List with Total Contracted Hour

Note: The Exploratory Data Analysis (EDA) for the PBJ dataset is comprehensively included in this report. This EDA involves thorough data cleaning and exploratory analysis, which are crucial for understanding and uncovering insights within the PBJ dataset. Additionally, the EDA incorporates various charts used throughout this report.

https://colab.research.google.com/drive/1mvDRYjd6YdLWgZLY8zVvVoQRJ_zikLOS?usp=sharing

Technical Stack: Excel, Power Querry, Python

Dataset:

Payroll Based Journal Daily Nurse Staffing https://data.cms.gov/quality-of-care/payroll-based-journal-daily-nurse-staffing

Total Contracted Hours and Percentile by State https://www.bls.gov/charts/state-productivity/hours-worked-by-regions-and-states.htm