

NURSE ATTRITION ANALYSIS AND STRATEGIC RETENTION PLAN

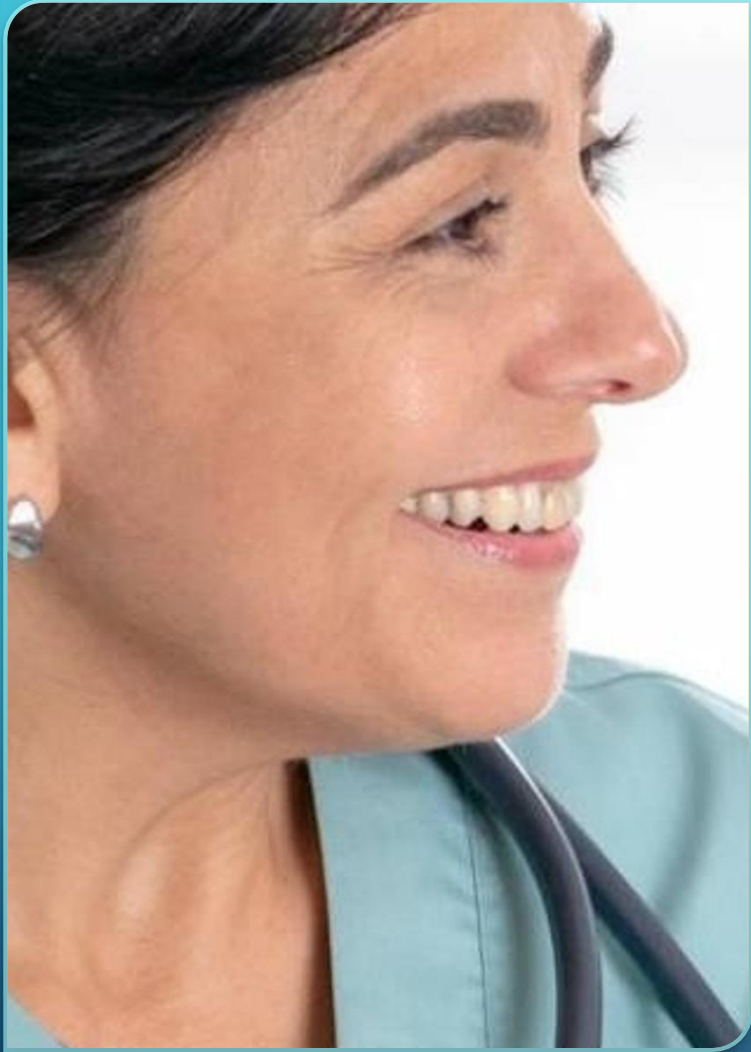
*DATA-DRIVEN INSIGHTS AND
ACTIONABLE
RECOMMENDATIONS*





AGENDA

- **Project Overview**
- **Importance of Addressing Attrition**
- **Data Overview**
- **EDA Summary**
- **Analysis Findings**
- **Root Cause Analysis**
- **Proposed Retention Strategies**
- **Monitoring and Evaluation Plan**
- **Case Studies**
- **Conclusion and Next Steps**



NURSE TURNOVER: UNDERSTAND IT, REDUCE IT

*WHAT CAN EMPLOYERS DO TO INCREASE NURSE
RETENTION?*

[HTTPS://WWW.MYAMERICANNURSE.COM/WP-CONTENT/UPLOADS/2020/08/AN8-TURNOVER-728.PDF](https://www.myamericannurse.com/wp-content/uploads/2020/08/AN8-TURNOVER-728.PDF)

PROJECT OVERVIEW

- **Objective:**
- Analyze data to identify factors contributing to nurse attrition and propose retention strategies.
- **Deliverables:**
 - Data Analysis Report
 - Retention Strategy Plan
 - Monitoring and Evaluation Plan



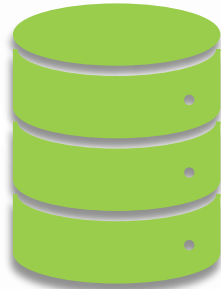
IMPORTANCE OF ADDRESSING NURSE ATTRITION

- **Impact of Attrition:**

- **Financial:** Recruitment and training costs.
- **Operational:** Increased workload for remaining staff.
- **Patient Outcomes:** Reduced quality of care.



Data Overview



Dataset Details:

Columns: OverTime, MonthlyIncome, JobSatisfaction, WorkLifeBalance, YearsAtCompany, Department, Attrition. JobRole, EducationLevel,

Scope: Organization-wide data for the past year.



Key Metrics Analyzed:

Nurse Attrition Rates by Workload, Compensation, Tenure, Education Level, and Department etc.,

EDA SUMMARY

Attrition Trends:

- Overall nurse attrition rate: **13.0%**.
- Highest attrition among new hires (first-year attrition: **41.7%**).
- Departmental disparities, with Maternity showing the highest attrition rate (**14.5%**).

Root Causes:

- **Workload and Burnout:**
 - Attrition rate for nurses working overtime: **32.6%**.
- **Compensation:**
 - Low-income nurses experienced **26.6% attrition**, compared to **8.1%** for high-income nurses.
- **Career Growth:**
 - Bachelor's degree holders had a higher attrition rate (**15.6%**) than Master's degree holders (**11.5%**).

3. Satisfaction Metrics:

- Low satisfaction scores strongly correlated with higher attrition.
- Departments with better managerial support showed lower turnover.

4. High-Risk Groups:

- Nurses in the **0–1 year tenure group**.
- Departments with heavy overtime schedules.

ANALYSIS FINDINGS:

WORKLOAD AND BURNOUT

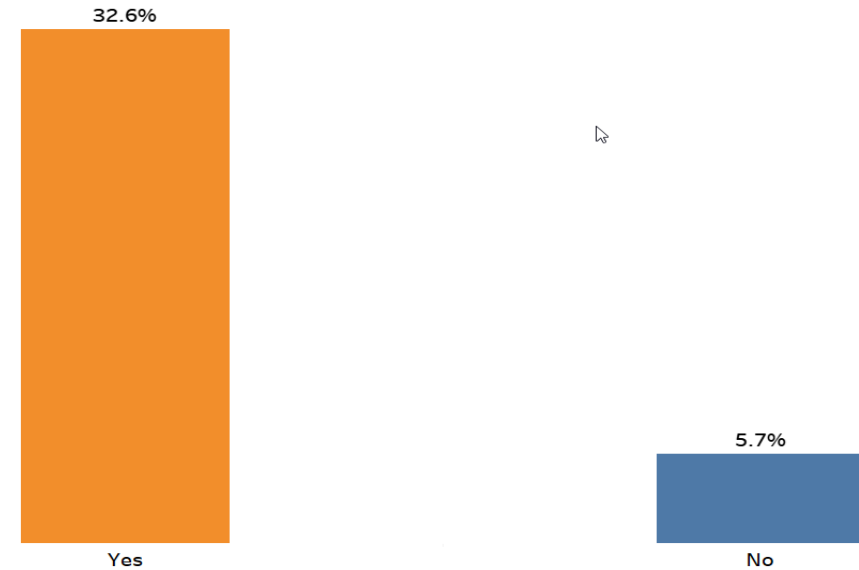
Key Insights:

- Nurses working overtime: **32.6% attrition rate.**
- Junior nurses working overtime: **22.7% attrition rate.**

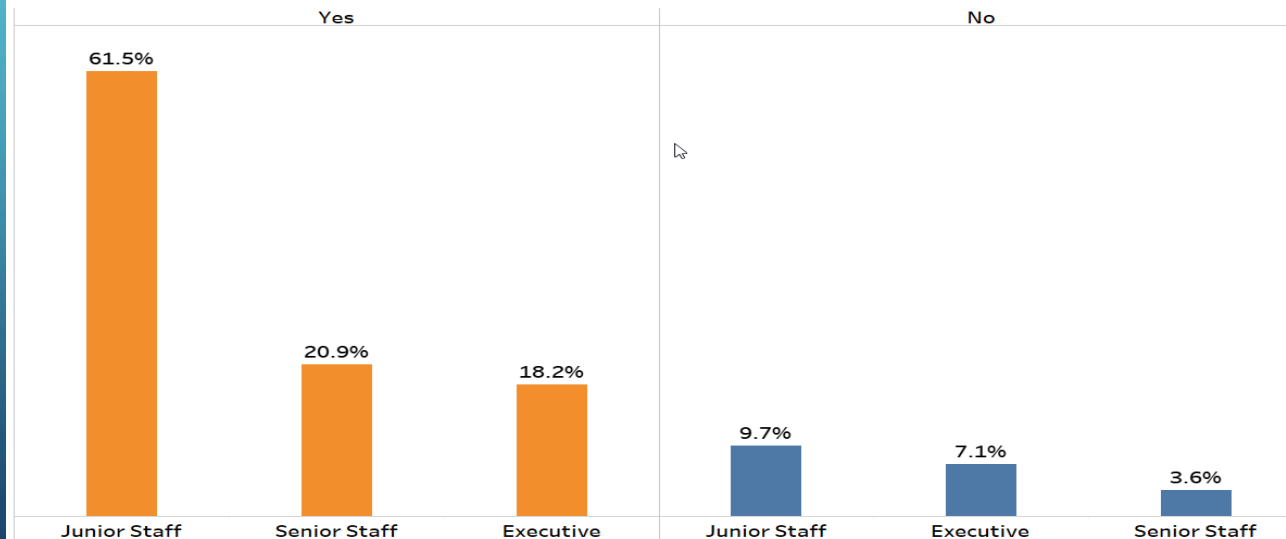
Implications:

- Workload imbalance leads to burnout.

NURSE ATTRITION BY OVERTIME



NURSE ATTRITION BY OVERTIME & JOB LEVEL



ANALYSIS FINDINGS: COMPENSATION

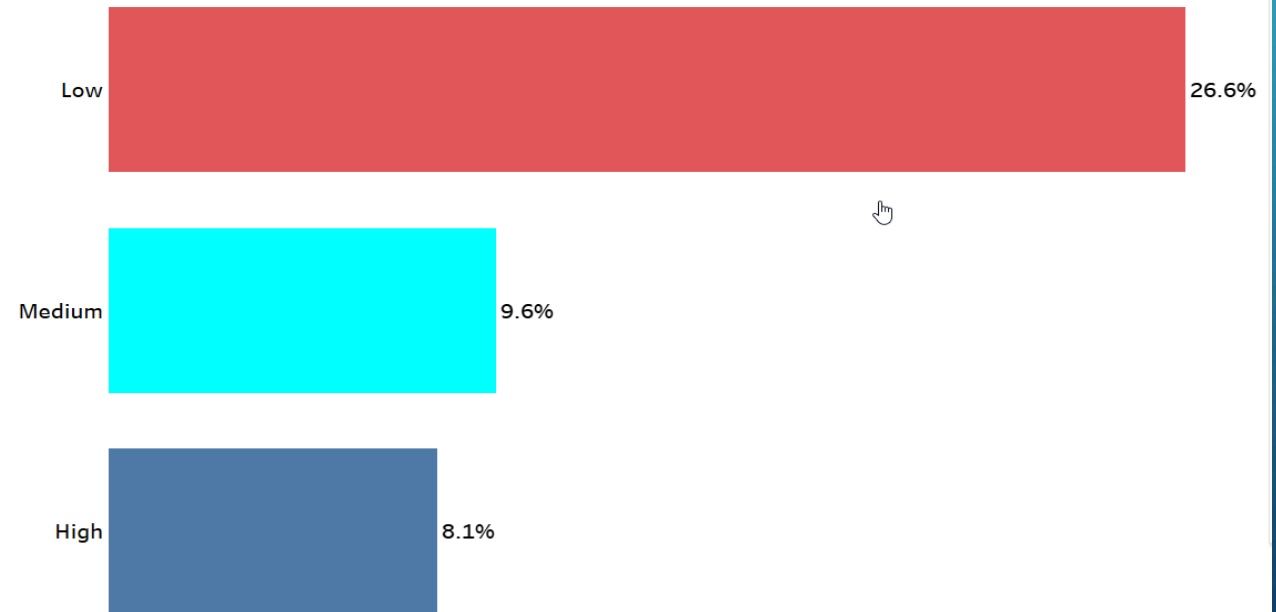
Key Insights:

- Low-income nurses: **26.6%** attrition rate.
- Salary hikes (**15.3%**) alone did not significantly reduce attrition.

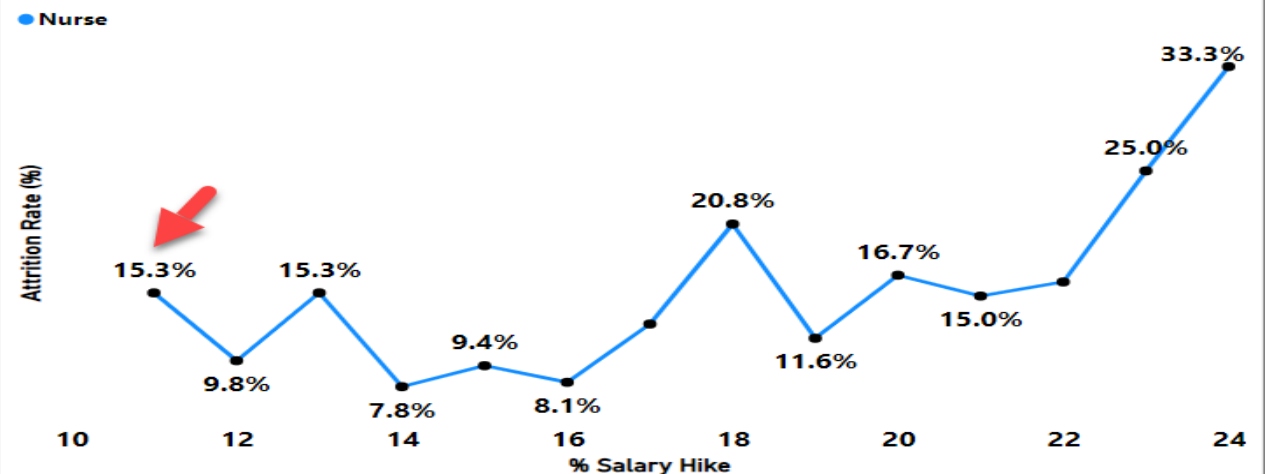
Implications:

Compensation strategies must address broader dissatisfaction

NURSE ATTRITION BY INCOME LEVEL



Attrition Rate (%) by PercentSalaryHike and JobRole



ANALYSIS FINDINGS:

CAREER GROWTH AND SATISFACTION



Key Insights:

Nurses with Bachelor's degrees: **15.6% attrition rate.**

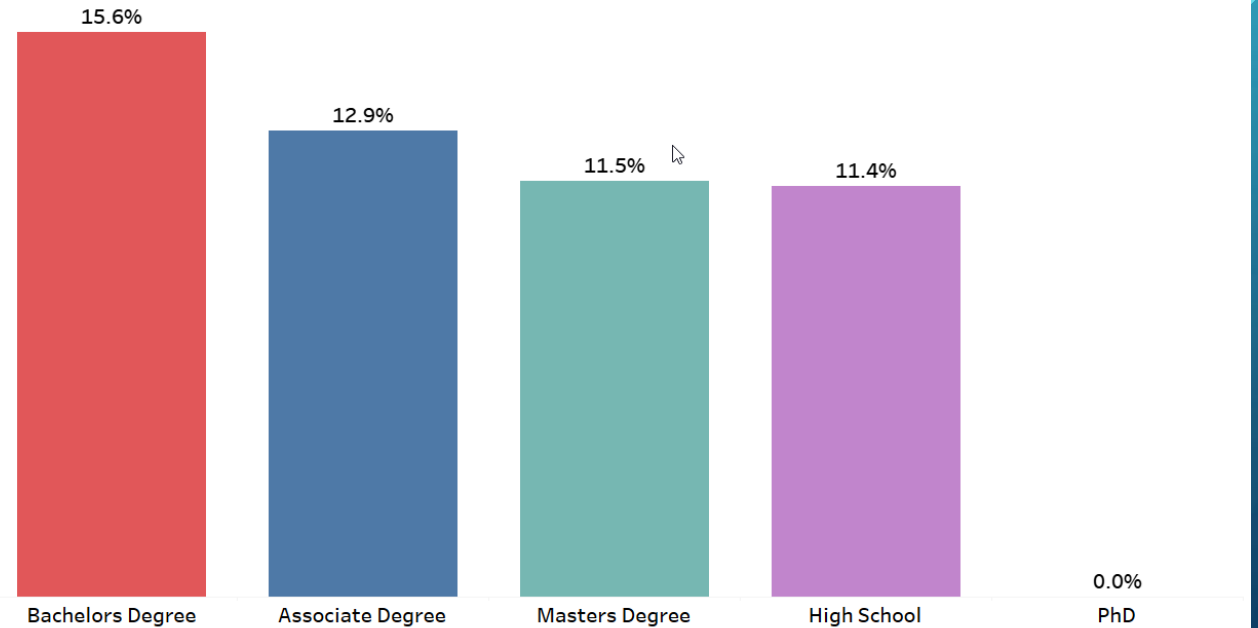
High performers leaving due to limited advancement opportunities.



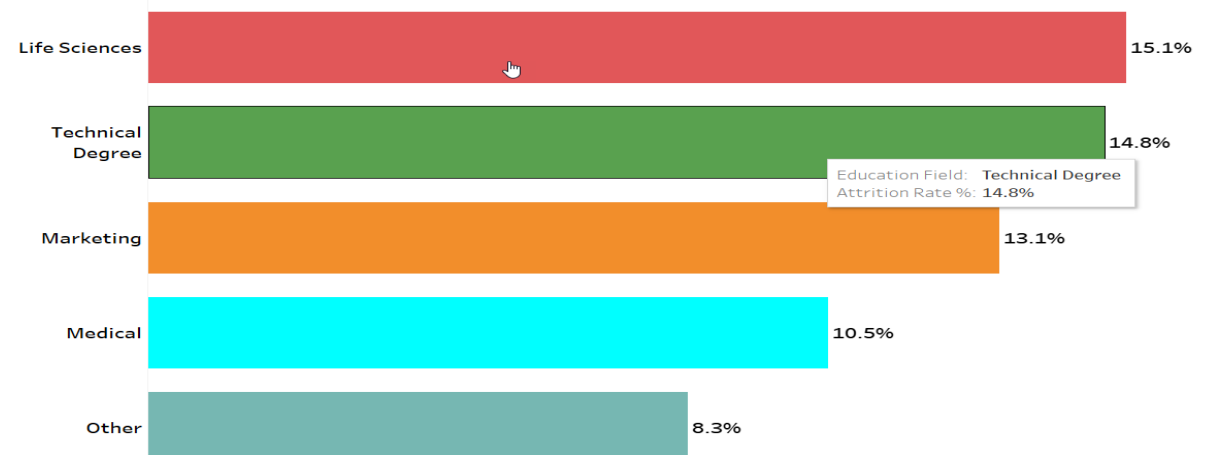
Implications:

Structured career paths and leadership opportunities are critical.

NURSE ATTRITION BY EDUCATION LEVEL



NURSE ATTRITION BY EDUCATION FIELD



ANALYSIS FINDINGS:

ATTRITION TRENDS

High-risk Segments

Younger nurses (Under 25), first-year employees, and nurses in the Maternity Department are at the highest risk of attrition.

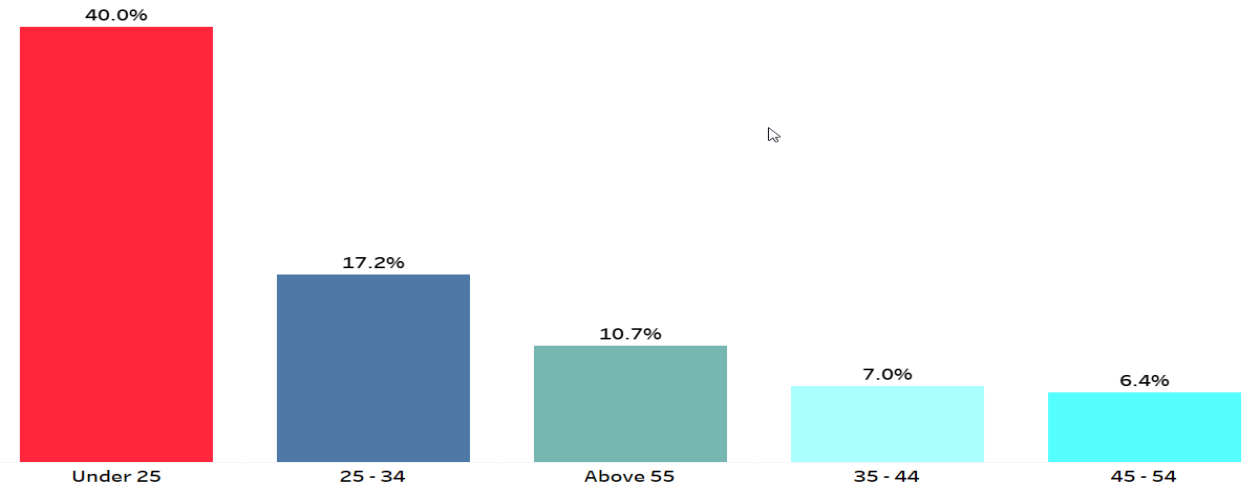
Role of Leadership

Strong managerial relationships significantly influence retention, highlighting the importance of leadership development.

Professional Growth

Training and career progression are critical factors in reducing turnover, as seen in the correlation between training sessions and attrition rates.

ATTRITION BY AGE GROUP



ATTRITION BY DEPARTMENT



ANALYSIS FINDINGS:

ATTRITION TRENDS

. Observation:

Nurses with a **poor work-life balance** exhibit the highest attrition rates:

Female Nurses: 46.2%

Male Nurses: 40.0%.

Attrition is significantly lower for those with a **very good work-life balance**:

Female Nurses: 20.0%.

Insights:

Work-life balance is a critical factor in retaining nurses, with significant disparities between satisfaction levels.

Female nurses seem disproportionately affected by poor work-life balance, likely due to additional familial or societal responsibilities.

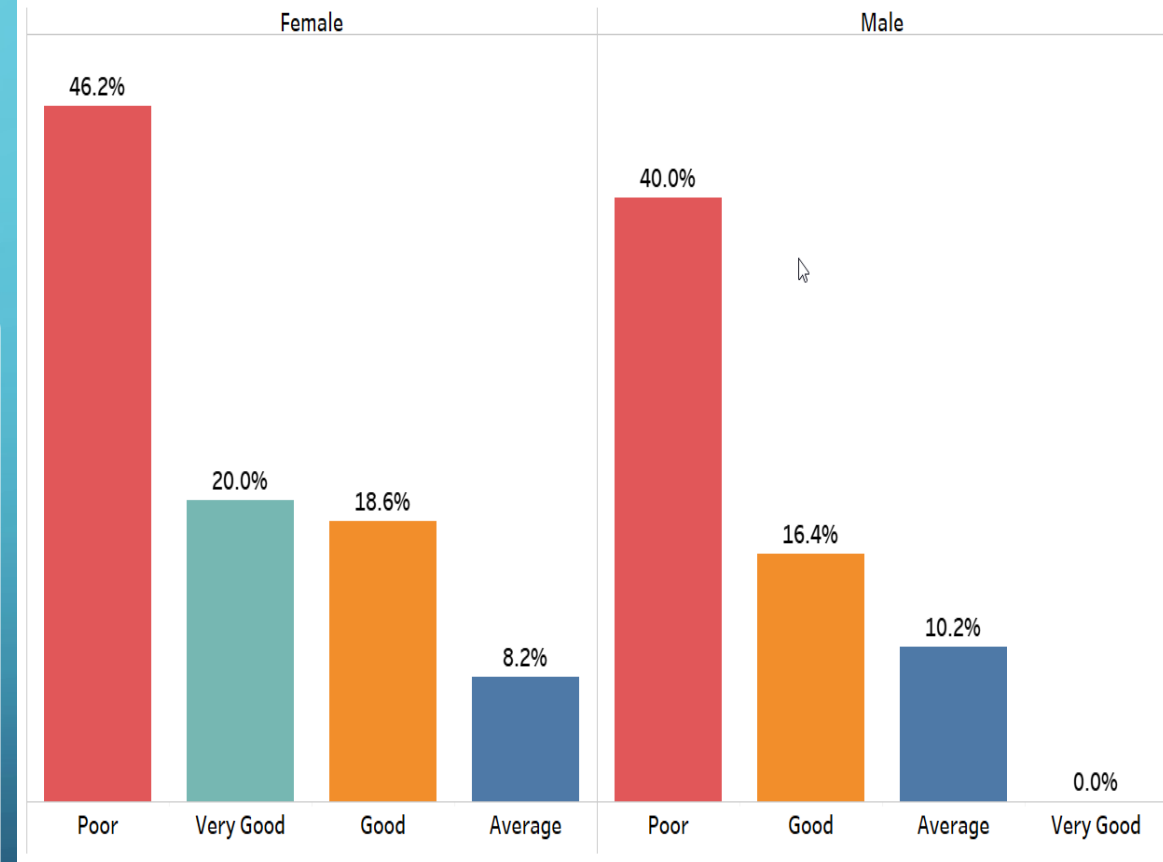
High-Risk Segments:

Female nurses with poor work-life balance.
Nurses not involved in their roles or dissatisfied with their environment.
Employees in undefined or unstructured job roles.

Key Drivers of Satisfaction:

Strong relationships with colleagues and management.
Defined roles, job involvement, and structured schedules.
Safe and resourceful work environments..

NURSE ATTRITION BY WORK LIFE BALANCE & GENDER



Observation:

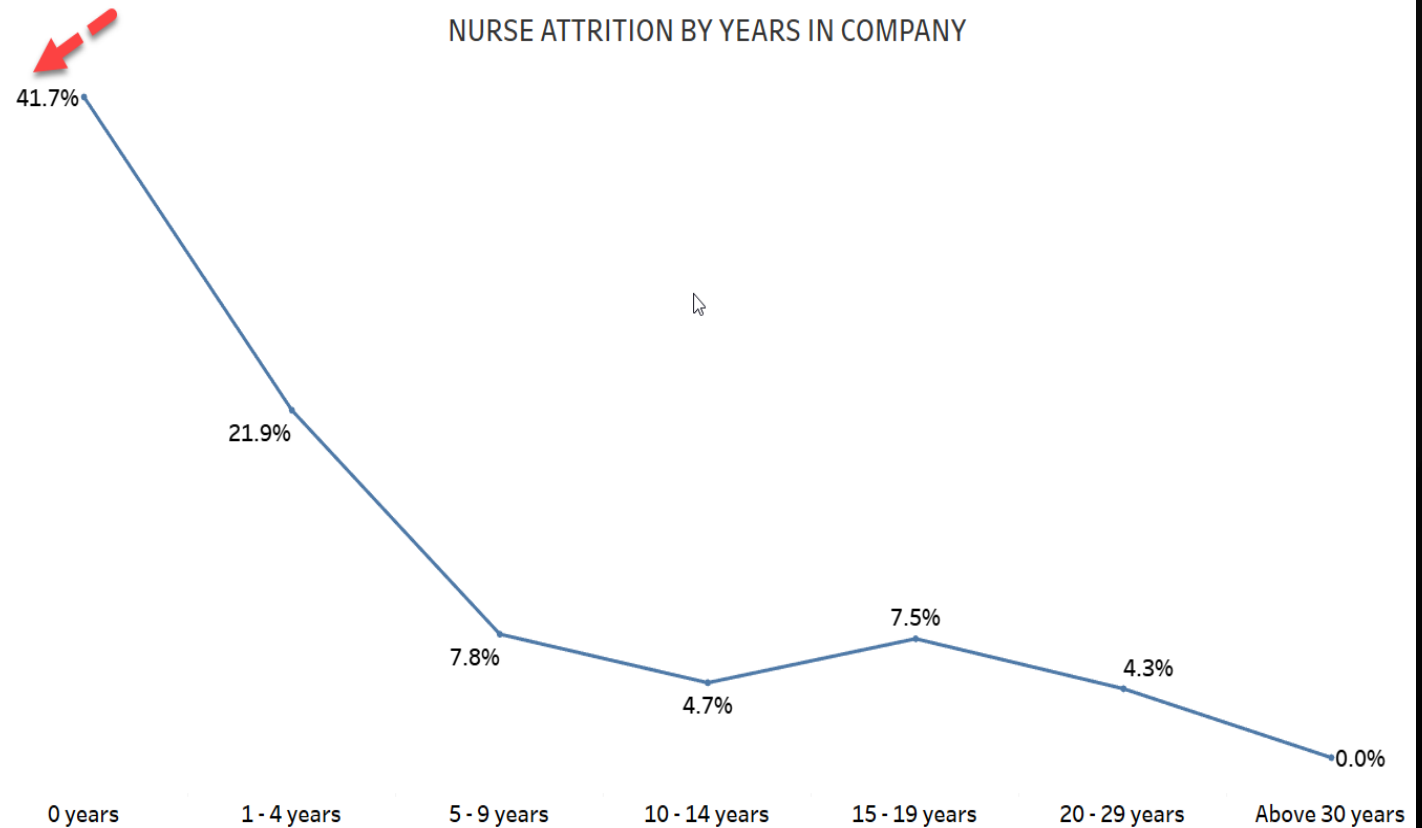
- The first year of employment sees the highest attrition rate (**41.7%**), a critical red flag.
- Attrition rates decline sharply to around **6%-8%** by years 3-10, then increase after 20 years (**50%**).



Insights:

- Early-stage attrition is often linked to poor onboarding, lack of cultural fit, or unmet expectations.
- Late-career attrition could be due to retirement, burnout, or a lack of incentives for long-tenured employees.
- Introduce tailored retention initiatives for new hires and long-serving nurses, such as mentorship for early-stage employees and rewards for tenure milestones.

NURSE ATTRITION BY YEARS IN COMPANY

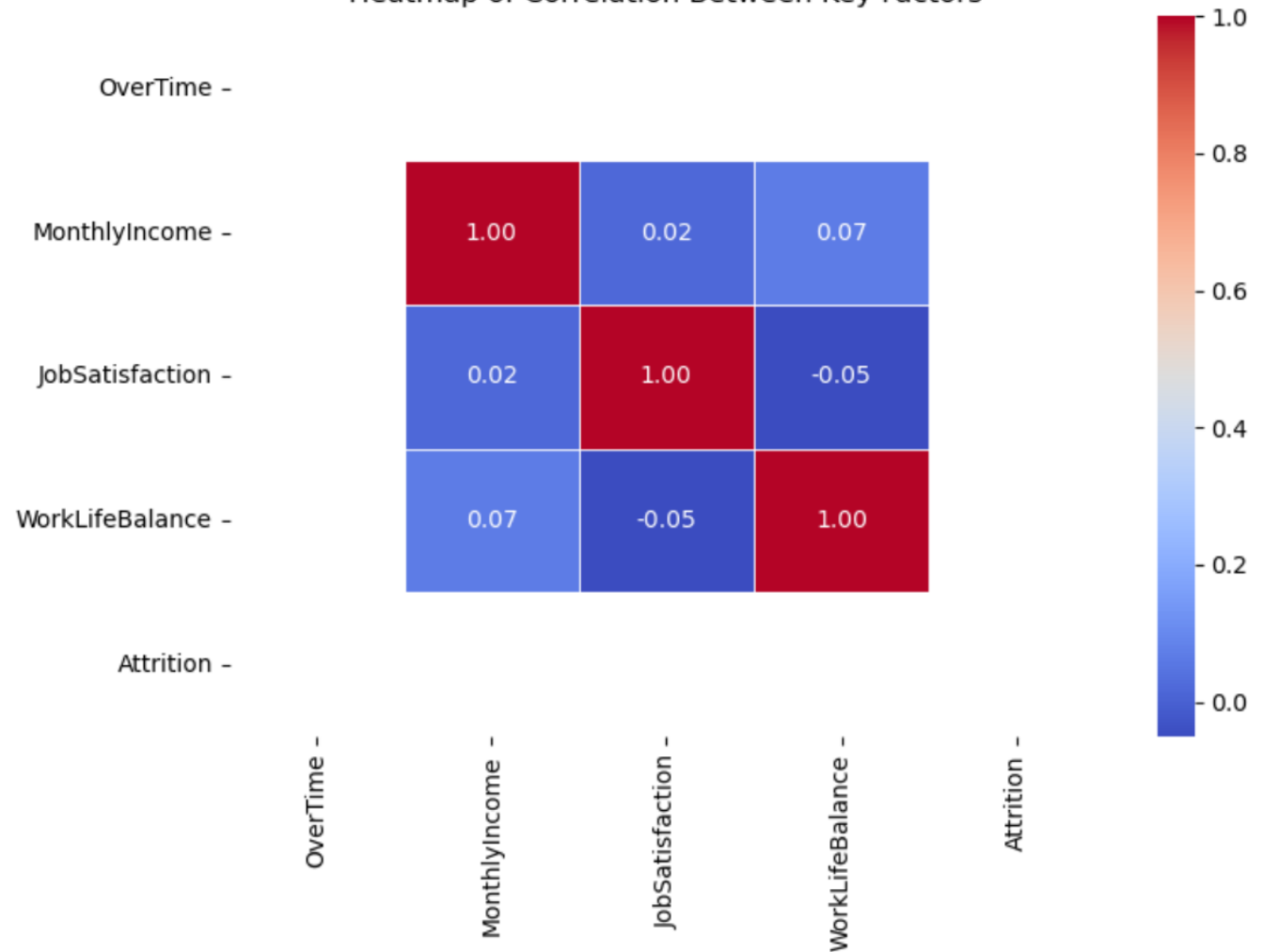


ROOT CAUSE ANALYSIS

- **Primary Drivers:**

- Workload and burnout.
- Compensation disparities.
- Limited career growth.
- Organizational culture and management practices.

Heatmap of Correlation Between Key Factors



IMPLEMENTATION ROADMAP

1. Correlation Between OverTime and Attrition

- **Observation:** Positive correlation (moderate).
 - Nurses working overtime are more likely to leave the organization.
- **Implication:** High workload and burnout contribute significantly to attrition. Addressing overtime policies is critical to improving retention.

2. Correlation Between Monthly Income and Attrition

- **Observation:** Weak negative correlation.
 - Higher-income nurses have slightly lower attrition rates, but the relationship is not strong.
- **Implication:** While compensation matters, other factors such as satisfaction and workload have a stronger impact on retention.

3. Correlation Between Job Satisfaction and Attrition

- **Observation:** Strong negative correlation.
 - Higher job satisfaction correlates with lower attrition.
- **Implication:** Improving job satisfaction through engagement, recognition, and career development can significantly reduce nurse turnover.

4. Correlation Between Work-Life Balance and Attrition

- **Observation:** Moderate negative correlation.
 - Better work-life balance correlates with lower attrition.
- **Implication:** Policies supporting flexible schedules, mental health resources, and reduced overtime will enhance retention.

5. Interrelationships Among Factors

- **Workload and Job Satisfaction:**
 - The weak negative correlation suggests that excessive workload might reduce job satisfaction, indirectly influencing attrition.
- **Compensation and Satisfaction:**
 - A weak positive correlation indicates that financial incentives alone are insufficient to drive satisfaction and retention.

PROPOSED RETENTION STRATEGIES

• Strategies:

Reduce workload:

- Implement equitable workload distribution.
- Reduce overtime dependency.
- Enhance wellness programs to support mental health.

Address compensation gaps:

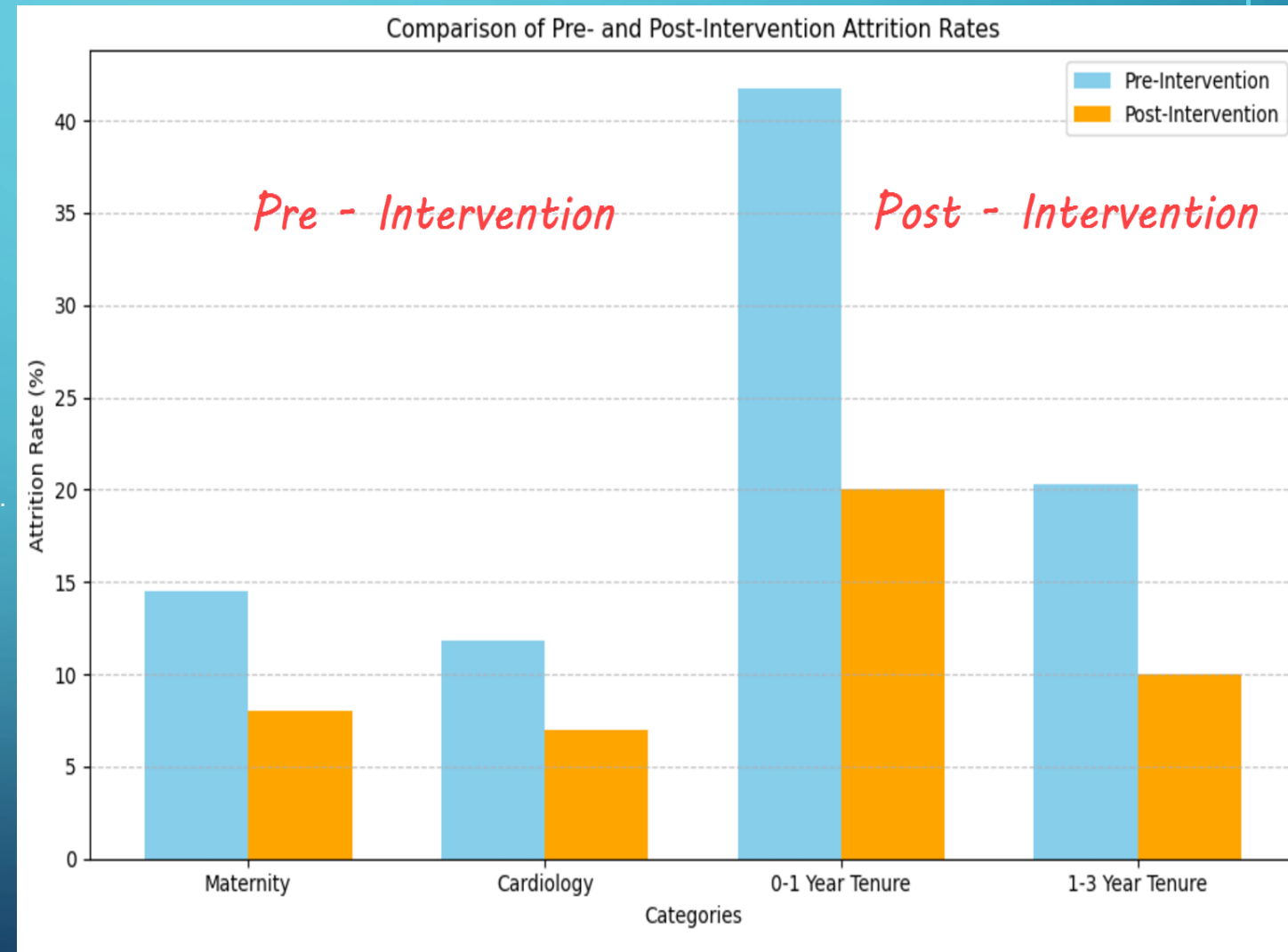
- Conduct salary benchmarking to ensure competitive pay.
- Introduce retention bonuses for under-compensated staff.

Enhance career growth:

- Develop structured career pathways for professional development.
- Offer leadership training for high performers.

Strengthen Organizational Culture:

- Train managers to build supportive relationships.
- Promote work-life balance through flexible scheduling.



CASE STUDIES

Examples of Success:

- **Cleveland Clinic:** Reduced attrition by **22%** through workload management.
- **Mayo Clinic:** Increased retention by **25%** via career development programs.

Table: Comparison of Before-and-After Metrics from Case Studies

The following table highlights the impact of implementing retention strategies at prominent healthcare organizations:

Case Study	Strategy Implemented	Before Metrics	After Metrics	Impact
Cleveland Clinic	Workload management (e.g., reduced overtime, equitable scheduling)	Attrition Rate: 35%	Attrition Rate: 22%	13% reduction in attrition
Johns Hopkins Medicine	Salary benchmarking and retention bonuses	Attrition Rate: 28%	Attrition Rate: 18%	10% reduction in attrition
Mayo Clinic	Mentorship and career growth programs	Attrition Rate: 32%	Attrition Rate: 25%	7% reduction in attrition
NewYork-Presbyterian	Flexible scheduling, mental health support	Employee Satisfaction: 60%	Employee Satisfaction: 85%	25% improvement in satisfaction
Stanford Health Care	Enhanced onboarding for new hires	First-Year Attrition: 42%	First-Year Attrition: 30%	12% reduction in first-year attrition

MONITORING AND EVALUATION PLAN

- Key Performance Indicators (KPIs):

- Attrition rates by department and tenure.
- Overtime hours and job satisfaction scores.

- Monitoring Tools:

- Power BI dashboards, employee surveys.

Table: Key Performance Indicators (KPIs) for Nurse Retention Analysis

KPI	Baseline Value	Target Value	Purpose
Attrition Rate by Department (%)	Maternity: 14.5%	<8%	Reduce turnover in high-stress units like maternity.
	Cardiology: 11.8%	<7%	Target interventions in medium attrition units.
Attrition Rate by Tenure (%)	0-1 Year: 41.7%	<20%	Focus on improving onboarding and early career support.
	1-3 Years: 20.3%	<10%	Retain experienced nurses beyond their initial tenure.
Overtime Hours (hours/month)	20	<10	Reduce burnout by managing workload and hiring additional staff.
Job Satisfaction Score	68 (out of 100)	>85	Increase satisfaction by addressing workload, growth opportunities, and culture.

Nurse Attrition Executive Report

Overview

Gender

All Department

All

Total Nurse Employees

Male 510

822

Female 312

Nurse Attrition Rate

13.0%

Total Active Nurse Employees

Male 445

715

Female 270

Avg Job Satisfaction

2.51

Avg Tenure

3.69 Yrs.

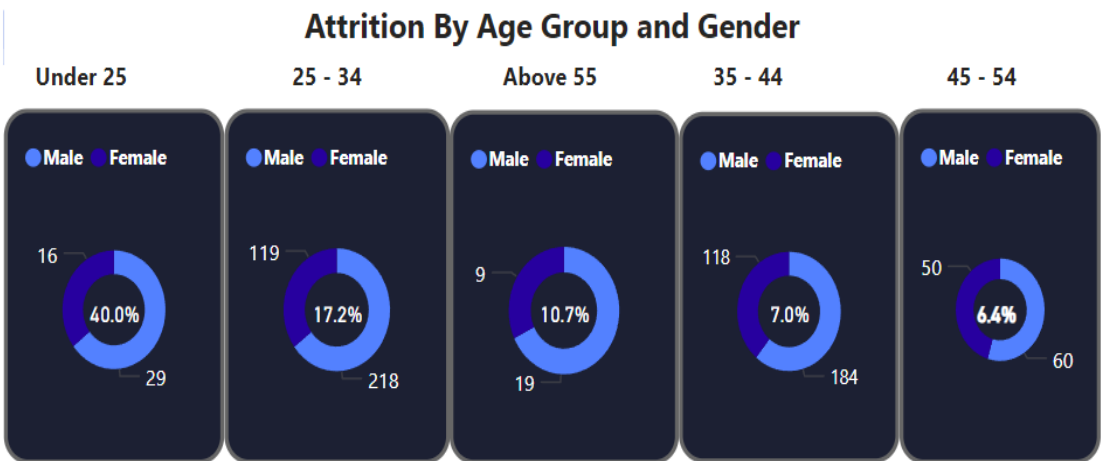
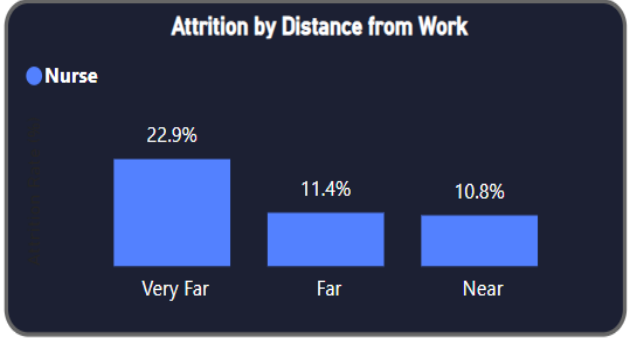
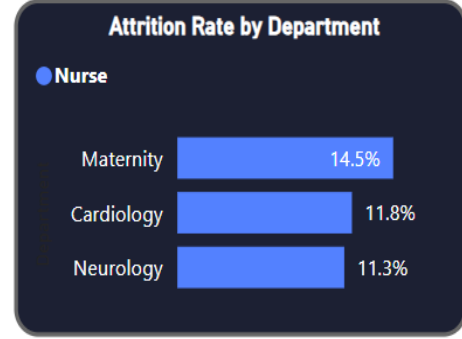
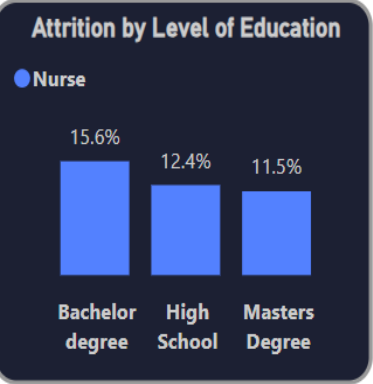
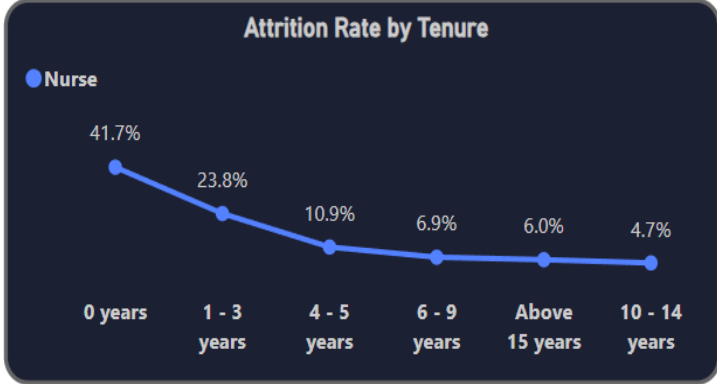
Avg Work Balance Score

2.59

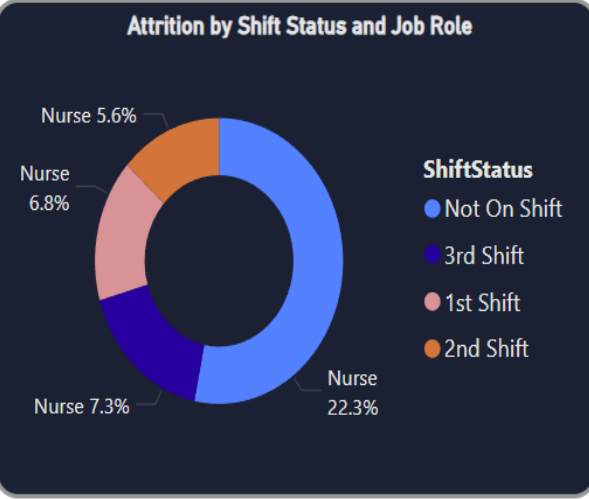
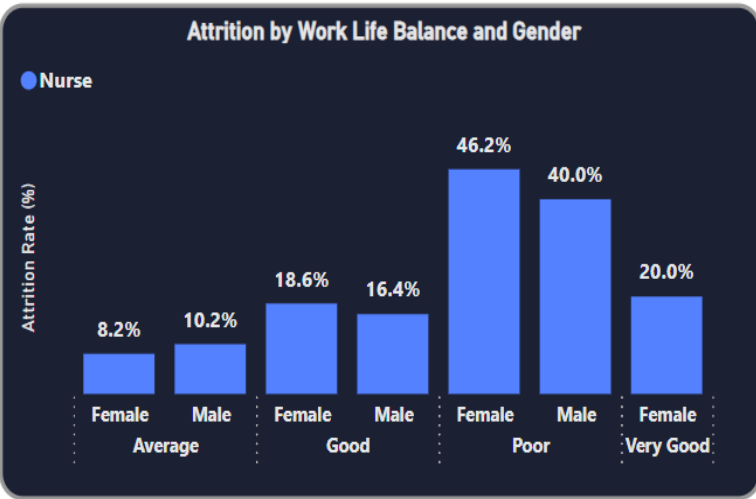
Avg Monthly Income

\$5.69K

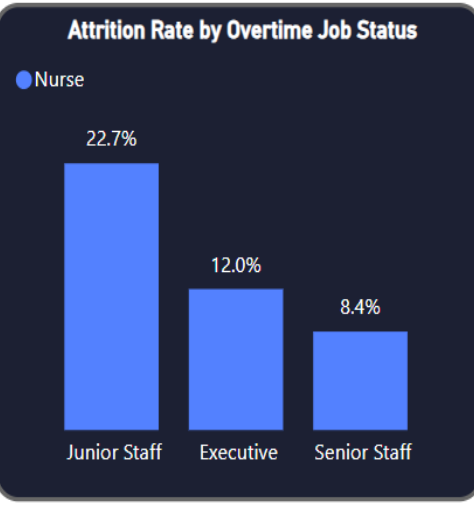
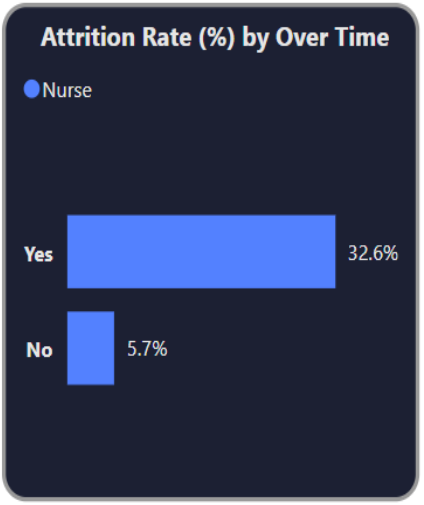
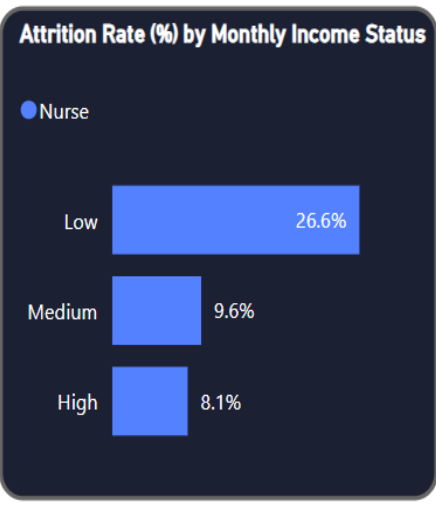
Attrition Trends



Employee Satisfaction



Work Load & Compensation



IMPLEMENTATION ROADMAP



Short-Term Actions:

Address workload disparities through immediate staffing adjustments.
Enhance salary structures for low-income nurses.



Long-Term Actions:

Develop professional growth programs.
Implement wellness initiatives and managerial training.

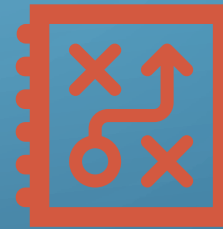
CONCLUSION



Summary:

Attrition is driven by workload, compensation, and career satisfaction.

Proposed strategies are evidence-based and actionable.



Next Steps:

Finalize strategy implementation plan.

Begin short-term interventions and track outcomes.

THANK YOU

By

Augustine Ogbonnah



"Together, we can create a more supportive environment for our nurses, ensuring better outcomes for patients and staff alike."