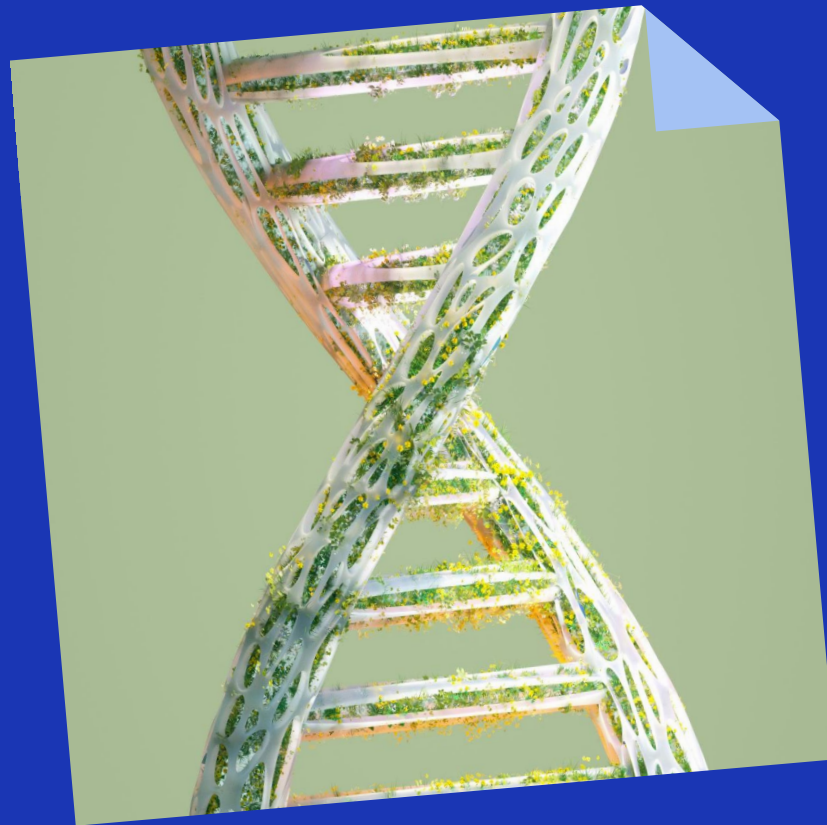


# Nurse Attrition Analysis & Retention Strategies

A Data-Driven Approach to  
Reducing Nurse Turnover

Hong Tran  
19 March 2025



# Project Objective

## Objective

- Analyze nurse attrition trends in the healthcare organization.
- Identify key factors contributing to turnover.
- Propose data-driven retention strategies to improve nurse retention.

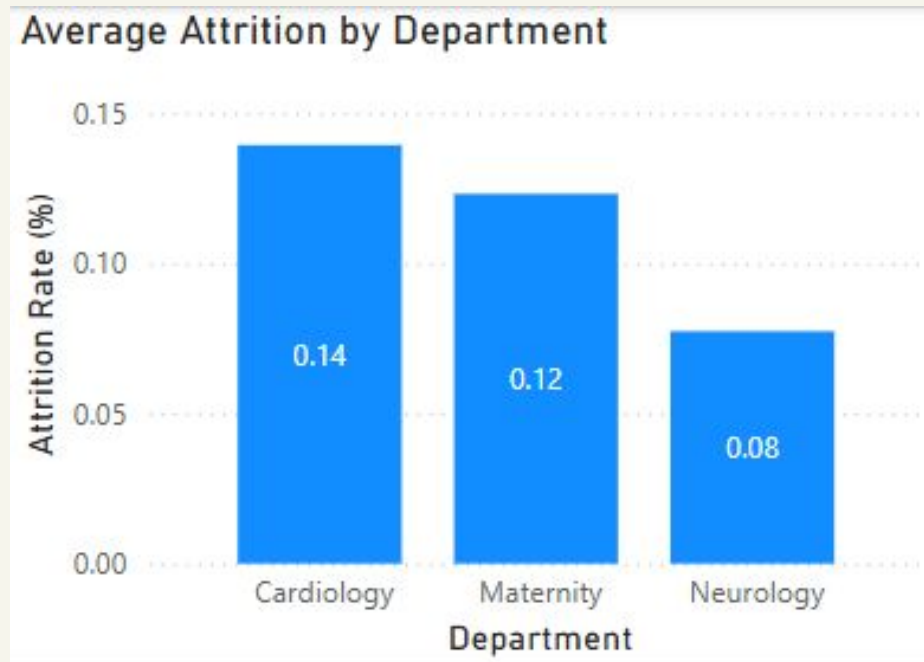
Tools Used: Power BI, Excel, Healthcare Analytics



# Current State of Nurse Attrition

## Key Metrics

- **Overall Attrition Rate:** ~13% of nurses leave annually.
- **Departmental Breakdown:**
  - **Cardiology:** 14% turnover
  - **Maternity:** 12% turnover
  - **Neurology:** 8% turnover (lowest)
- **Demographic Trends:**
  - Highest attrition among **20-30-year-old nurses**.
  - Older nurses (41-60) exhibit **higher retention rates**.

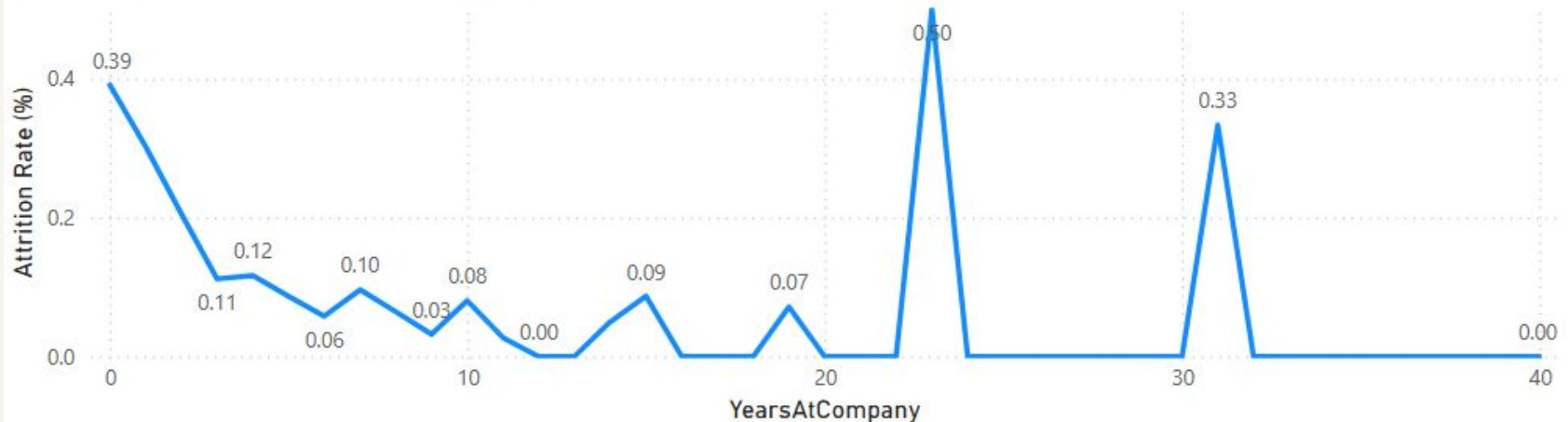


# Trend Analysis – Nurse Attrition Over Time

## Key Insights

- Highest turnover occurs within the first 3 years of employment.
- ICU, ER, and Surgery have the highest turnover rates due to workload pressures.
- Poor work-life balance strongly correlates with high attrition.

Average Attrition (%) by YearsAtCompany



# Key Factors Contributing to Nurse Turnover

## Overtime & Workload

- Nurses working overtime are 6x more likely to leave (29% vs. 5%).
- Excessive workloads lead to burnout and dissatisfaction.

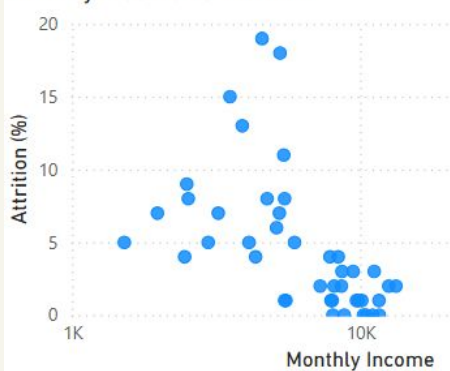
Average Attrition Rate (%) by Overtime



## Salary & Compensation

- Lower-income nurses (\$1,000 - \$3,000) have the highest attrition rate (27.4%).
- Higher-income nurses (\$8,000+) have the lowest attrition rate (4%).

Monthly Income vs. Attrition



## Job Satisfaction & Work-Life Balance

- Poor work-life balance = higher turnover rates.
- Job satisfaction scores below 3 = higher resignation risk.

Attrition (%) by Job Satisfaction

JobSatisfaction	Average of Attrition (numeric)
1	0.16
2	0.14
3	0.12
4	0.08
<b>Total</b>	<b>0.12</b>

# Proposed Retention Strategies

## 1. Reduce Overtime & Workload

- Limit excessive overtime & improve nurse-to-patient ratios.
- Implement better scheduling flexibility & shift rotations.
- Use predictive analytics to track high-risk nurses.

## 2. Salary Adjustments & Incentives

- Increase pay for lower-income nurses to reduce financial-driven resignations.
- Offer retention bonuses for high-risk departments (ICU, ER, Surgery).
- Provide tuition reimbursement & career development programs.

## 3. Improve Job Satisfaction & Work-Life Balance

- Implement wellness programs & mental health resources.
- Conduct regular engagement surveys & exit interviews.
- Enhance career advancement opportunities to retain experienced nurses.

# Conclusion & Next Steps

- **Monitor & track high-risk nurses with predictive analytics.**
- **Implement policy changes to reduce workload & improve job satisfaction.**
- **Review salary structures & incentives to retain key talent.**

**Goal: Reduce nurse attrition by 25-40% in the next 6-12 months.**

## Nurse Retention Roadmap: Short-Term & Long-Term Fixes

