

Healthcare Workforce Mental Health Dataset

Overview

The **Healthcare Workforce Mental Health Dataset** provides synthetic yet realistic data designed for analyzing workplace mental health trends in healthcare environments. The dataset contains 5,000 records, each representing an individual employee. It is tailored to enable exploration, predictive modeling, and analysis of key factors influencing mental health outcomes in the healthcare sector.

Columns in the Dataset

1. **Employee ID:** A unique identifier for each employee (e.g., **HCP-00001**).
2. **Employee Type:** The employee's role in the healthcare system (e.g., Registered Nurse, Physician, Medical Assistant).
3. **Department:** The department associated with the employee's role (e.g., General Medicine, ICU, Pediatrics).
4. **Workplace Factor:** The primary workplace challenge experienced by the employee (e.g., Heavy Workload, Poor Work Environment).
5. **Stress Level:** A score from 1 to 10 representing the employee's stress level, influenced by their workplace factors.
6. **Burnout Frequency:** A categorical variable describing the frequency of burnout experienced:
 - **Never**
 - **Occasionally**
 - **Often**
7. **Job Satisfaction:** A score from 1 to 5 indicating how satisfied the employee is with their job:
 - **1:** Very Dissatisfied
 - **5:** Very Satisfied
8. **Access to EAPs:** Indicates whether the employee has access to Employee Assistance Programs (Yes/No).
9. **Mental Health Absences:** The number of days the employee has taken off due to mental health-related issues.
10. **Turnover Intention:** Indicates whether the employee intends to leave their current role (Yes/No).

Data Relationships

1. **Employee Type → Workplace Factor:** Certain roles are more likely to experience specific workplace challenges. For example, Registered Nurses are more prone to "Heavy Workload," while Healthcare Administrators often face "Career Stagnation."
2. **Workplace Factor → Stress Level:** Each workplace factor maps to a range of stress levels based on its severity.
3. **Stress Level → Burnout Frequency:** Higher stress levels correlate with more frequent burnout occurrences.
4. **Burnout Frequency → Job Satisfaction:** Frequent burnout negatively impacts job satisfaction.
5. **Job Satisfaction + Stress Level → Turnover Intention:** Low job satisfaction and high stress levels increase the likelihood of turnover intention.
6. **Access to EAPs → Mental Health Absences:** Employees with access to EAPs generally take fewer mental health-related absences.

Insights Gained

This dataset allows for several valuable insights, such as:

- Identifying roles with the highest levels of stress and burnout.
- Analyzing how workplace factors influence turnover intention.
- Exploring correlations between access to EAPs and mental health absences.
- Predicting job satisfaction based on stress levels and burnout frequency.

Use Cases

- **Exploratory Data Analysis (EDA):** Identify patterns and relationships between mental health factors.
- **Predictive Modeling:** Predict turnover intentions or job satisfaction based on workplace stressors.
- **Visualization:** Create impactful charts to communicate insights about workplace mental health.

Data Source and Generation

The dataset was synthetically generated using Python and OpenAI's ChatGPT for conceptual guidance, refinement, and validation. Probabilistic mappings were used to ensure realism. Relationships between columns are based on industry research, including sources such as the CDC, WHO, and academic studies on healthcare workforce mental health.