# 1. Facility Records Dataset

## Table 1.1: Summary Statistics of Facility Records

| Statistic | Year | Stations | Mortality Rate Facility | Readmission Rate Facility | Facility Star | Experience Star | Staff Score |
| --- | --- | --- | --- | --- | --- | --- | --- |
| count | 37738.0 | 37741.0 | 35434.0 | 35342.0 | 23504.0 | 19895.0 | 23504.0 |
| mean | 2021.0277 | 20.6395 | 21.8025 | 26.5761 | 3.6638 | 3.6111 | 87.2847 |
| std | 1.9791 | 9.5086 | 6.7285 | 7.3739 | 0.9571 | 0.8141 | 3.7339 |
| min | 2018.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 70.0 |
| 25% | 2019.0 | 16.0 | 17.6 | 22.1 | 3.0 | 3.0 | 85.0 |
| 50% | 2021.0 | 21.0 | 21.0 | 26.6 | 4.0 | 4.0 | 88.0 |
| 75% | 2023.0 | 25.0 | 24.9 | 30.9 | 4.0 | 4.0 | 90.0 |
| max | 2024.0 | 76.0 | 83.5 | 70.6 | 5.0 | 5.0 | 98.0 |

## Table 1.2: Information of Facility Records DataFrame

| Column | Non-Null Count | Dtype |
| --- | --- | --- |
| year | 37738 | float64 |
| county\_name | 36941 | object |
| stations | 37741 | int64 |
| prof\_np | 37741 | object |
| chain\_own | 37741 | object |
| chain\_org | 37735 | object |
| mortality\_rate\_facility | 35434 | float64 |
| readmission\_rate\_facility | 35342 | float64 |
| readmission\_category | 33293 | object |
| fac\_star | 23504 | float64 |
| xp\_star | 19895 | float64 |
| staff\_scr | 23504 | float64 |

## Table 1.3: Missing Values in Facility Records

| Column | Missing Values |
| --- | --- |
| year | 3 |
| county\_name | 800 |
| stations | 0 |
| prof\_np | 0 |
| chain\_own | 0 |
| chain\_org | 6 |
| mortality\_rate\_facility | 2307 |
| readmission\_rate\_facility | 2399 |
| readmission\_category | 4448 |
| fac\_star | 14237 |
| xp\_star | 17846 |
| staff\_scr | 14237 |

# 2.Aggregated Facility Dataset

## Table 2.1: Summary Statistics of Aggregated Facility Data

| **Statistic** | **Year** | **Facility Count** | **Stations** | **Prof NP** | **Chain Own** | **Survey Count** | **Survey Rate** | **Facility Star** | **Experience Star** | **Communication Score** | **Quality Score** | **Information Score** | **Physical Score** | **Staff Score** | **Facility Score** | **Mortality Rate Facility** | **Readmission Rate Facility** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| count | 316.0 | 316.0 | 316.0 | 316.0 | 316.0 | 316.0 | 78.0 | 275.0 | 234.0 | 275.0 | 275.0 | 275.0 | 275.0 | 275.0 | 275.0 | 314.0 | 314.0 |
| mean | 2021.0253 | 116.8924 | 2406.9557 | 0.7971 | 0.9052 | 3895.8861 | 27.0702 | 3.8387 | 3.8102 | 82.5134 | 82.058 | 81.8006 | 85.9367 | 88.0574 | 89.4609 | 21.943 | 25.0156 |
| std | 2.003 | 225.6887 | 5132.349 | 0.2856 | 0.2107 | 8840.3032 | 3.4258 | 0.6546 | 0.5355 | 4.1934 | 2.5943 | 3.0896 | 3.4855 | 2.5433 | 2.5153 | 2.3958 | 3.1347 |
| min | 2018.0 | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 | 18.0 | 2.0 | 2.0 | 60.0 | 74.0 | 74.0 | 64.0 | 79.8667 | 81.0 | 16.2625 | 14.775 |
| 25% | 2019.0 | 16.0 | 262.0 | 0.7029 | 0.8889 | 380.0 | 24.75 | 3.4714 | 3.4598 | 80.0 | 80.6256 | 79.8396 | 84.0 | 86.561 | 88.0172 | 20.2589 | 23.7602 |
| 50% | 2021.0 | 40.0 | 800.0 | 0.9258 | 1.0 | 1188.0 | 26.7056 | 3.9333 | 3.8683 | 83.0 | 82.0 | 81.6667 | 86.0 | 88.0 | 89.6571 | 22.2653 | 25.475 |
| 75% | 2023.0 | 131.25 | 2416.0 | 1.0 | 1.0 | 3720.0 | 28.5833 | 4.25 | 4.0 | 85.3632 | 83.5264 | 83.75 | 88.3333 | 89.5817 | 91.0 | 23.5947 | 27.3283 |
| max | 2024.0 | 1522.0 | 34914.0 | 1.0 | 1.0 | 71876.0 | 36.0 | 5.0 | 5.0 | 91.0 | 91.0 | 90.0 | 92.5 | 98.0 | 97.0 | 27.0 | 30.0375 |

## Table 2.2: Information of Aggregated Facility DataFrame

| Column | Non-Null Count | Dtype |
| --- | --- | --- |
| county\_name | 316 | object |
| year | 316 | int64 |
| fac\_count | 316 | int64 |
| stations | 316 | int64 |
| prof\_np | 316 | float64 |
| chain\_own | 316 | float64 |
| survey\_count | 316 | int64 |
| survey\_rate | 78 | float64 |
| fac\_star | 275 | float64 |
| xp\_star | 234 | float64 |
| comm\_scr | 275 | float64 |
| quality\_scr | 275 | float64 |
| info\_scr | 275 | float64 |
| phys\_scr | 275 | float64 |
| staff\_scr | 275 | float64 |
| fac\_scr | 275 | float64 |
| mortality\_rate\_facility | 314 | float64 |
| readmission\_rate\_facility | 314 | float64 |
| patient\_hospital\_readmission\_category | 316 | object |

## Table 2.3: Missing Values in Aggregated Facility Data

| Column | Missing Values |
| --- | --- |
| county\_name | 0 |
| year | 0 |
| fac\_count | 0 |
| stations | 0 |
| prof\_np | 0 |
| chain\_own | 0 |
| survey\_count | 0 |
| survey\_rate | 238 |
| fac\_star | 41 |
| xp\_star | 82 |
| comm\_scr | 41 |
| quality\_scr | 41 |
| info\_scr | 41 |
| phys\_scr | 41 |
| staff\_scr | 41 |
| fac\_scr | 41 |
| mortality\_rate\_facility | 2 |
| readmission\_rate\_facility | 2 |
| patient\_hospital\_readmission\_category | 0 |