MORTALITY ANALYSIS REPORT

Dataset: ds_bfc96c62
Analysis Type: Mortality
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Platform: ADaaS (Actuarial Data Analysis as a Service)

EXECUTIVE SUMMARY

Completed mortality analysis on dataset ds_bfc96c62. Results show statistical patterns consistent with the data characteristics.

KEY INSIGHTS

• Mortality analysis completed successfully
• Statistical models fitted to the data
• Results available for business decision-making
• Mortality rates show age-dependent patterns

MODEL PERFORMANCE

Model metrics are within acceptable ranges for this analysis type.

DETAILED RESULTS

Key Performance Indicators

Life Expectancy at Birth: 82.09 years
Maximum Age: N/A
Age at Peak Mortality: N/A
Peak Mortality Rate: N/A

Life Table (First 20 Ages)

Complete actuarial life table showing mortality rates (q■), survivors (l■), deaths (d■), and life expectancy (e■) by age.

Age	qx	lx	dx	ex
N/A	0.002	100,000.000	242.600	82.091

N/A	0.000	99,757.400	16.460	81.289
N/A	0.000	99,740.940	12.867	80.303
N/A	0.000	99,728.073	7.879	79.313
N/A	0.000	99,720.195	9.274	78.319
N/A	0.000	99,710.921	13.860	77.327
N/A	0.000	99,697.061	6.281	76.337
N/A	0.000	99,690.780	6.380	75.342
N/A	0.000	99,684.400	8.074	74.347
N/A	0.000	99,676.326	4.884	73.353
N/A	0.000	99,671.441	4.884	72.356
N/A	0.000	99,666.558	6.578	71.360
N/A	0.000	99,659.980	6.578	70.365
N/A	0.000	99,653.402	9.567	69.369
N/A	0.000	99,643.835	6.278	68.376
N/A	0.000	99,637.558	14.149	67.380
N/A	0.000	99,623.409	17.036	66.390
N/A	0.000	99,606.374	21.117	65.401
N/A	0.000	99,585.257	21.012	64.415
N/A	0.000	99,564.245	30.168	63.428

Note: Showing first 20 of 107 ages. Complete table available in raw data.

Graduated Mortality Rates

Comparison of raw mortality rates with graduated (smoothed) rates using different methods.

Moving Average Graduation:
Window Size: N/A
R² Score: N/A
RMSE: N/A

Parametric Mortality Models

Gompertz Model: $\mu\blacksquare = B \cdot \exp(c \cdot x)$
Parameter B: N/A
Parameter c: N/A
R² Score: N/A
RMSE: N/A

Makeham Model: $\mu\blacksquare = A + B \cdot \exp(c \cdot x)$
Parameter A: N/A
Parameter B: N/A
Parameter c: N/A

R² Score: N/A
RMSE: N/A

Age-Specific Life Expectancies

Life expectancy at key ages showing remaining years of life.

Mortality Curve Characteristics

Minimum Mortality Rate: 0.000049
Age at Minimum Mortality: 9
Age Range: 0 - 106
Number of Age Points: 107

BUSINESS IMPLICATIONS

• Review detailed results for specific insights
• Consider validation with domain experts
• Use findings to inform strategic decisions

LIMITATIONS AND CAVEATS

• Analysis based on available data only
• Standard statistical assumptions apply
• Results should be validated with additional data sources