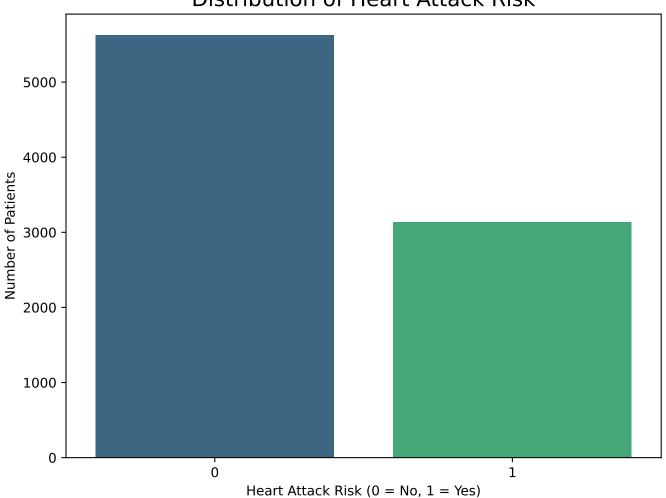
## Distribution of Heart Attack Risk



**Feature Correlation Matrix**  $oxed{-0.01}$   $oxed{-0.00}$   $oxed{-0.01}$   $oxed{0.01}$   $oxed{0.39}$   $oxed{-0.01}$   $oxed{-0.01}$   $oxed{0.00}$   $oxed{0.00}$   $oxed{0.00}$   $oxed{0.00}$   $oxed{0.00}$   $oxed{-0.00}$   $oxed{-0.00}$   $oxed{0.00}$   $oxed{-0.00}$   $oxed{0.00}$   $oxed{-0.01}$   $oxed{0.00}$   $oxed{-0.01}$   $oxed{0.00}$   $oxed{-0.01}$   $oxed{0.00}$   $oxed{-0.01}$   $oxed{0.00}$ cholesterol - -0.01 1.00 0.00 -0.01 -0.02 0.02 -0.01 -0.01 0.02 -0.01 -0.01 0.02 -0.01 -0.01 0.02 0.00 0.02 0.00 0.02 0.00 0.01 -0.01 0.01 diabetes - -0.01 -0.01 0.01 1.00 -0.01 0.00 0.01 0.01 -0.01 0.00 -0.00 0.01 0.00 -0.00 0.01 -0.00 -0.00 -0.00 -0.01 -0.00 -0.01 0.02 -0.01 -0.00 0.01 -0.00 0.01 -0.00 family history - 0.01 | -0.02 | -0.01 | -0.01 | 1.00 | 0.01 | -0.00 | 0.01 | -0.00 | 0.01 | -0.00 | 0.00 | 0.00 | -0.00 | -0.01 | -0.00 | 0.01 | -0.01 | -0.00 | -0.01 | 0.02 | 0.00 | 0.01 | 0.01 smoking - 0.39 0.02 -0.01 0.00 0.01 1.00 0.00 0.01 -0.00 -0.01 -0.00 0.01 0.00 0.01 -0.01 -0.01 -0.01 -0.01 -0.01 obesity - -0.01 -0.01 0.01 0.01 -0.00 0.00 1.00 -0.02 0.00 0.01 -0.01 0.01 -0.00 -0.01 0.00 0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 alcohol\_consumption - -0.01 -0.01 0.00 0.01 0.01 0.01 -0.02 1.00 -0.01 0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.00 -0.01 -0.01 -0.01 -0.01 -0.01 -0.00 exercise\_hours\_per\_week - 0.00 | 0.02 | 0.01 | -0.01 | -0.01 | -0.00 | 0.00 | -0.01 | 1.00 | 0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | 0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0. medication\_use - 0.00 | -0.00 | 0.01 | -0.00 | 0.00 | -0.01 | -0.01 | 0.00 | -0.01 | 0.01 | 0.00 | 0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 | 0.00 | -0.00 | 0.01 | -0.02 | 0.01 stress\_level - 0.02 -0.02 -0.00 0.01 0.02 -0.00 0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 sedentary\_hours\_per\_day - 0.02 | 0.02 | -0.01 | 0.00 | 0.00 | 0.00 | -0.01 | 0.01 | -0.00 | 0.02 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | 0.00 physical activity days per week - 0.00 | 0.02 | 0.00 | -0.00 | 0.01 | -0.01 | 0.01 | 0.01 | 0.01 | -0.01 | 0.01 | -0.01 | 0.01 | -0.01 | 0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 systolic bp - 0.00 0.00 0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 sex\_male - 0.02 0.01 -0.01 0.00 0.00 0.51 0.00 0.00 -0.01 0.00 -0.01 -0.02 0.00 0.00 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 diet\_unhealthy - 0.01 | 0.01 | -0.01 | -0.00 | 0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | -0.02 | 0.01 | -0.01 | -0.00 | 0.00 | -0.01 | 0.02 | 0.02 | 0.02 | 0.02 | -0.00 | -0.01 | -0.00 | -0.01 | -0.50 1.00 family\_history diet\_unhealthy

- 0.8 - 0.6 - 0.4 - 0.2 - 0.0 - -0.2 - **-**0.4

