Using this model to get initial results

STILL modeling PA as restricted cubic spline and polygenic score enters the model as a linear coefficient.

Note: This is NOT age-specific, although it will have to be in the actual analysis (thinking 65 vs 75)

Interpretation:

In order to make it more interpretable, I compare quintiles of genetic risk and physical activity. I treat 20th percentile physical activity (as in 20th percentile of risk) and 20th percentile genetic risk as the reference group and compare these to PA and genetic risk at different levels.

**Table 1: Overview of Results**

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| --- | --- | --- | --- | --- |
| **Genetic Risk** | **Physical Activity Risk (Lower Risk = MORE Physical Activity)** | | | |
| *20th Percentile* | *40th Percentile* | *60th Percentile* | *80th Percentile* |
| *20th Percentile* | 1 (Reference) | 1.06 (95% CI: 0.97-1.16) | 1.12 (95% CI: 0.99-1.26) | 1.10 (95% CI: 0.98-1.24) |
| *40th Percentile* | 1.28 (95% CI: 1.24-1.32) | 1.36 (95% CI: 1.24-1.50) | 1.41 (95% CI: 1.25-1.59) | 1.43 (95% CI: 1.27-1.62) |
| *60th Percentile* | 1.59 (95% CI: 1.50-1.68) | 1.69 (95% CI: 1.52-1.88) | 1.75 (95% CI: 1.54-1.99) | 1.77 (95% CI: 1.56-2.02) |
| *80th Percentile* | 2.04 (95% CI: 1.87-2.22) | 2.17 (95% CI: 1.92-2.45) | 2.25 (95% CI: 1.95-2.60) | 2.28 (95% CI: 1.97-2.63) |

**Figure 1: Forest Plot of Genetic and Overall PA and Risk of Incident CAD**

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| ***20th Percentile of PA vs 40th Percentile of PA***  Chart, box and whisker chart  Description automatically generated |
| ***20th Percentile of PA vs 60th Percentile of PA***  Chart, box and whisker chart  Description automatically generated |
| ***20th Percentile of PA vs 80th Percentile of PA***  Chart, box and whisker chart  Description automatically generated |