

What is the SCORE model?

Problem I: Mathematical inconsistency

Problem II: Cause specific mortality only

Problem III: Effect of changing risk factors

Perspectives

The European Heart SCORE system - a useful tool in practice?

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Disclosure of conflict of interest

The authors declare to have no conflict of interest, financial or otherwise, with respect to this presentation.

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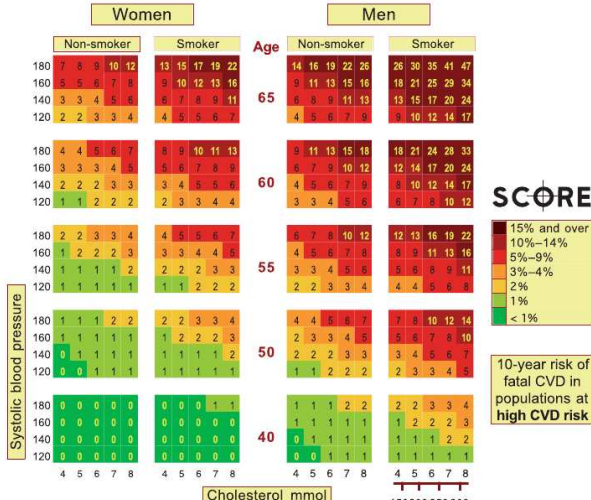
Problem III: Effect of changing risk factors

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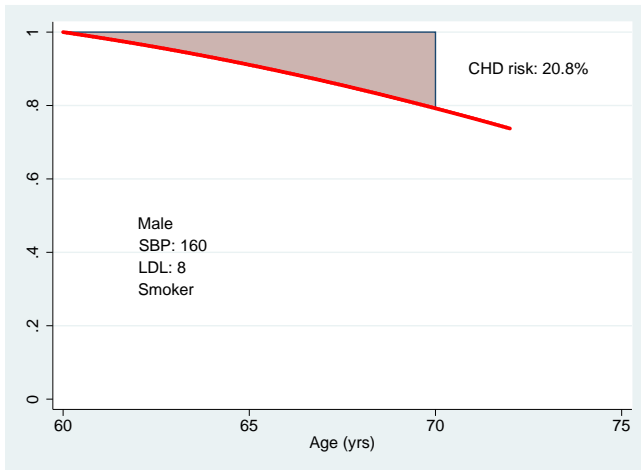
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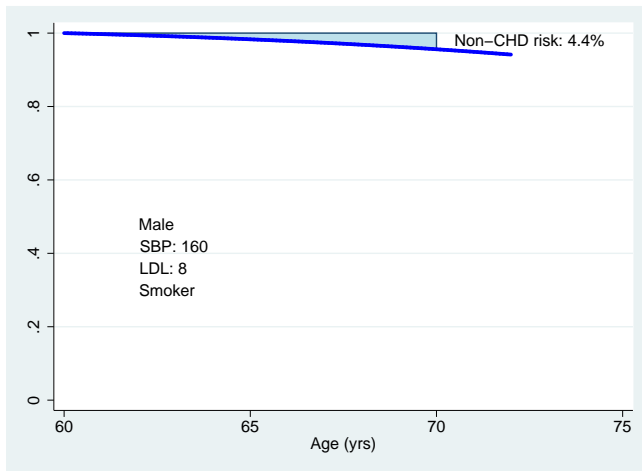
Ten year risk of fatal CHD



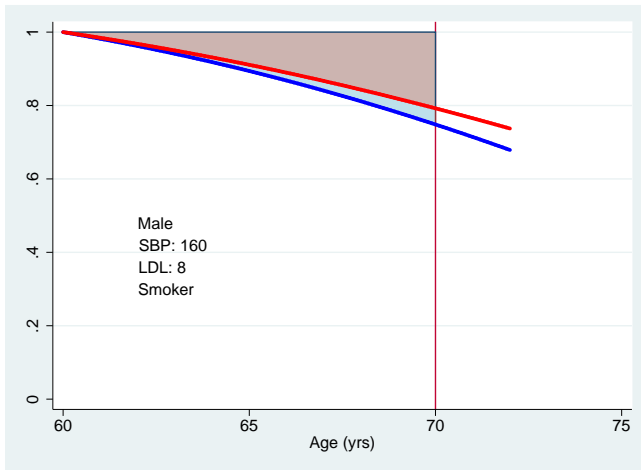
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Ten year risk of fatal Non-CHD CVD



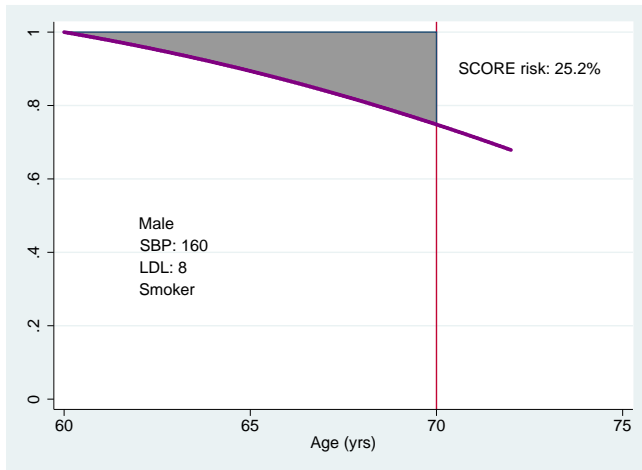
Ten year risk of fatal CVD



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Ten year risk of fatal CVD



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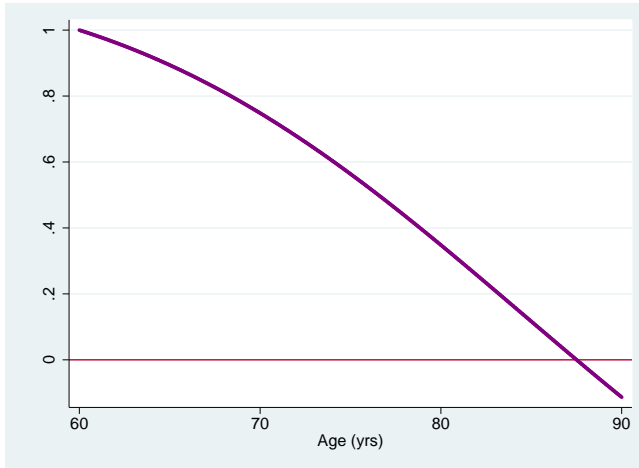
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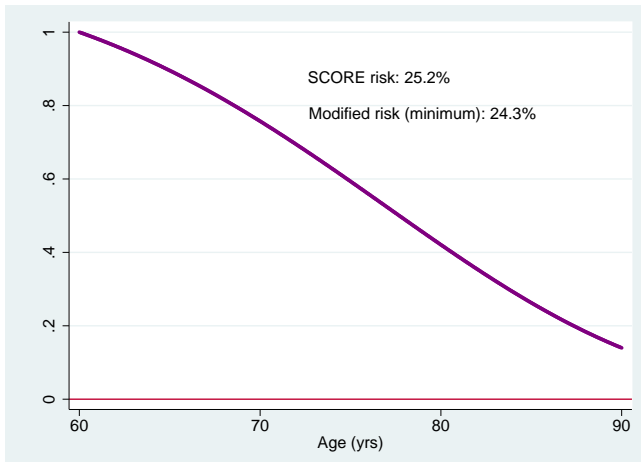
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Perspectives

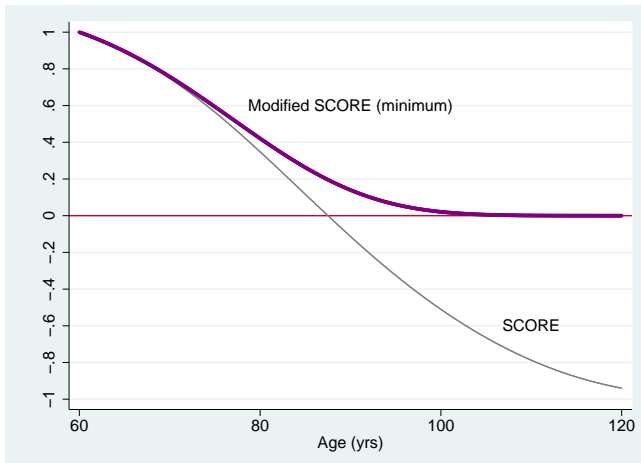
HIGH risk



Die first from minimum of CHD and non-CHD CVD fatal event



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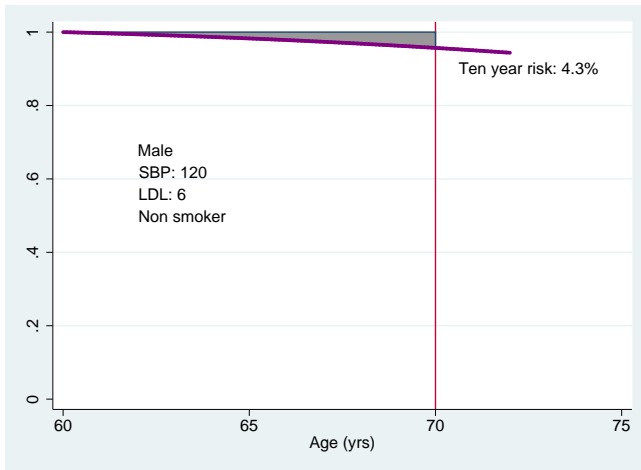
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Low risk



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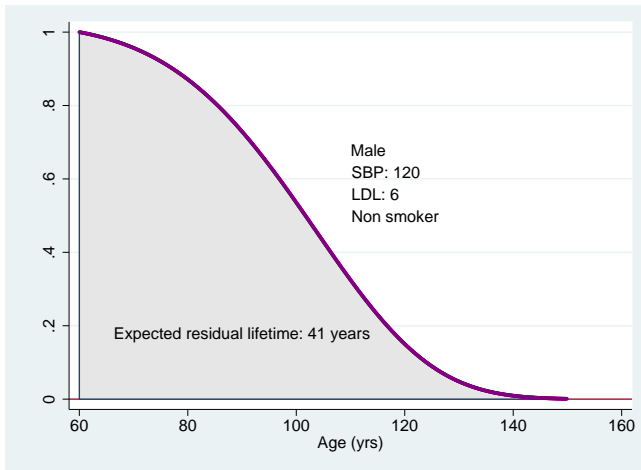
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LOW risk – looong residual life time expectancy



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Perspectives

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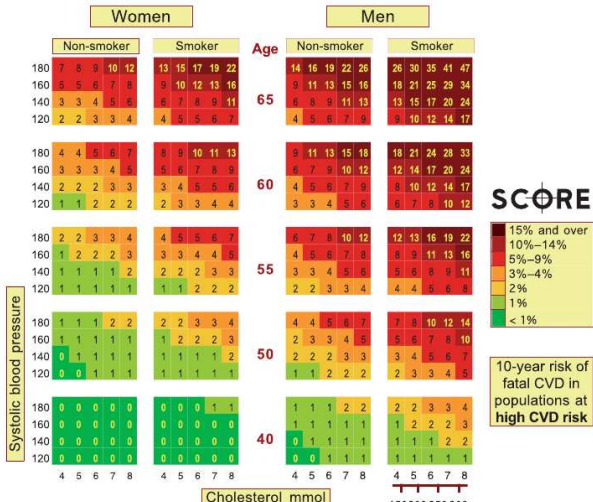
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Change of risk factor



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Perspectives and questions

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- ▶ Do we need SCORE?
- ▶ Present all-cause mortality?
- ▶ How do we present treatment effectiveness?

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Thank you for your attention!

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Conroy R M, Pyörälä K, Fitzgerald A P, Sans S, Menotti A, Backer G D, Bacquer D D, Ducimetière P, Jousilahti P, Keil U, Njølstad I, Oganov R G, Thomsen T, Tunstall-Pedoe H, Tverdal A, Wedel H, Whincup P, Wilhelmsen L, Graham I M, S C O R E project group.

Estimation of ten-year risk of fatal cardiovascular disease in europe: the SCORE project.

Eur Heart J 2003; **24**:987–1003.