



**FACHHOCHSCHULE  
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# **The impact of ageing, inequality and the evolution of morbidity on future health expenditure**

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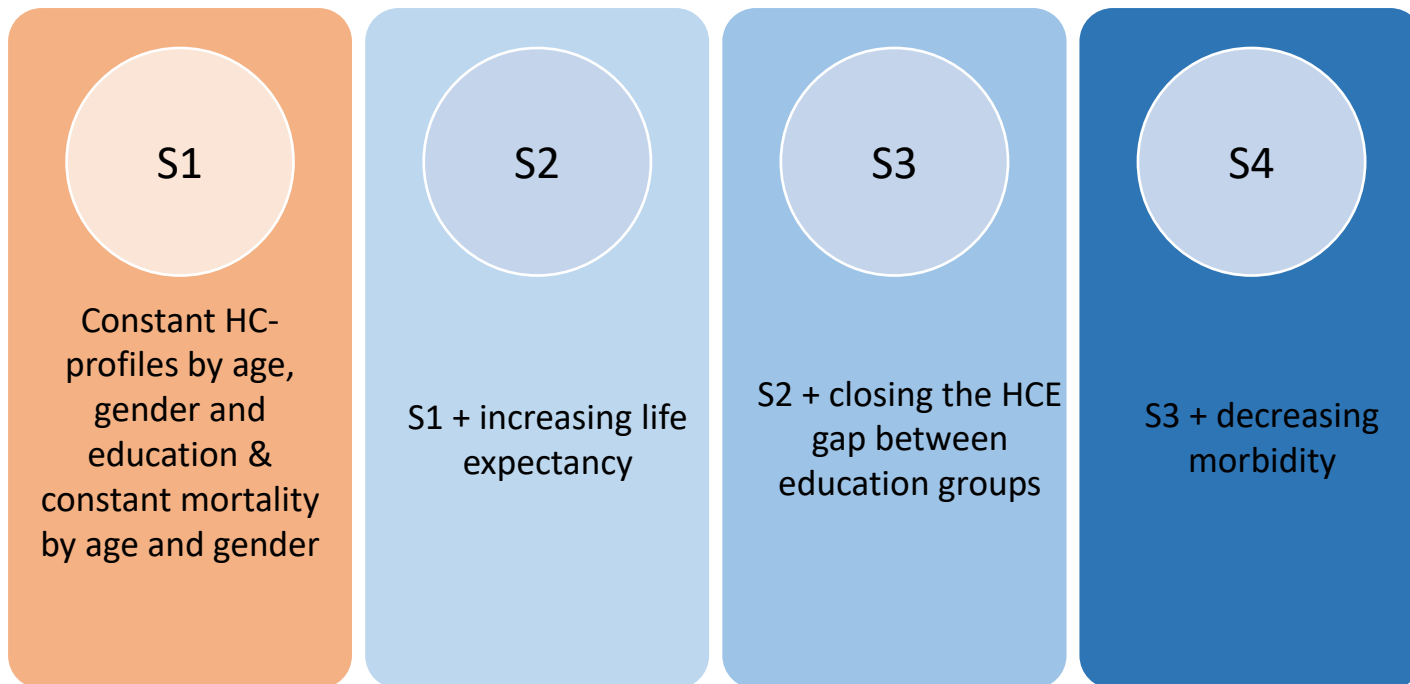
- Healthcare expenditure (HCE) outpaced economic growth in most advanced economies and is projected to rise as a share of GDP in coming decades
- Literature on determinants of HCE growth distinguishes between demographic and non-demographic cost factors
- Non-demographic drivers explain most of past increases, however:
  - Findings on the relationship between ageing and HCE still inconclusive (Breyer and Lorenz, 2021)
  - Growing impact of demographic transition in the next 2-3 decades
- Social inequalities in health as additional, little studied cost factor (Asaria et al., 2016)

- (1) How large is the role of different factors associated with ageing on future long-term HCE?
  - a) Population age-structure
  - b) Life expectancy
  - c) Morbidity and healthy life years
  
- (2) To what extent can social inequality impact HCE?

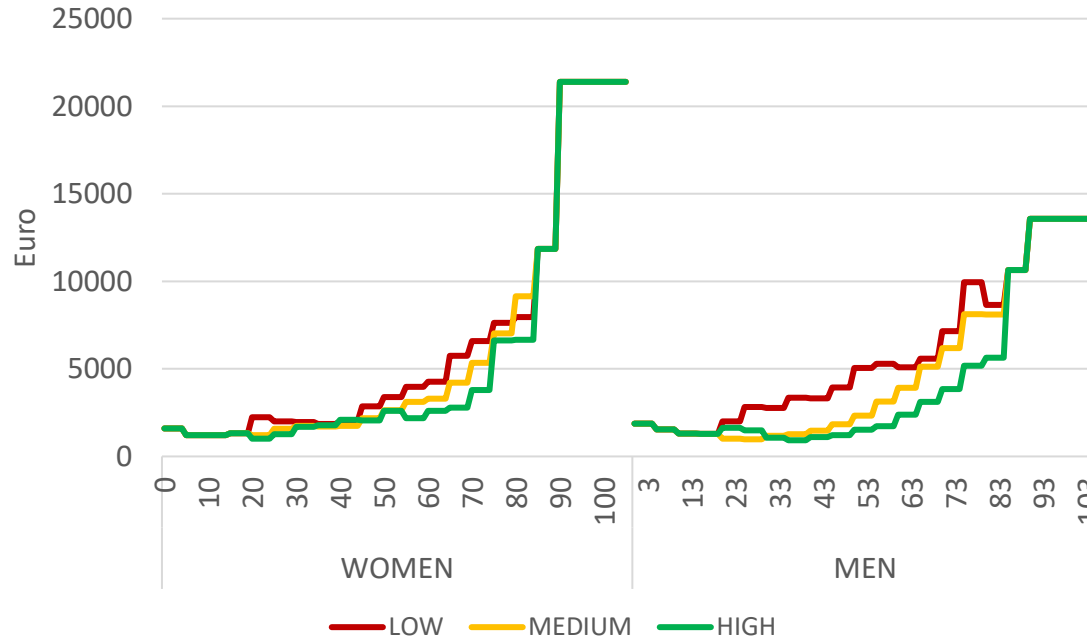
## Microsimulation with combination of micro and macro data

- We project future [HCE for Austria up to the year 2060](#)
- Average [cost profiles by gender, age, and education](#) (L, M, H):
  - combining survey data (ATHIS) and price weights for healthcare services
  - consistent with aggregate System of Health Accounts (SHA)
- Cost profiles combined with [official population projections](#) in the [microsimulation model microDEMS](#) to:
  - disentangle the impact of different cost drivers
  - project different HCE scenarios for the Austrian population

How does total HCE change over time (2020 -2060) assuming...

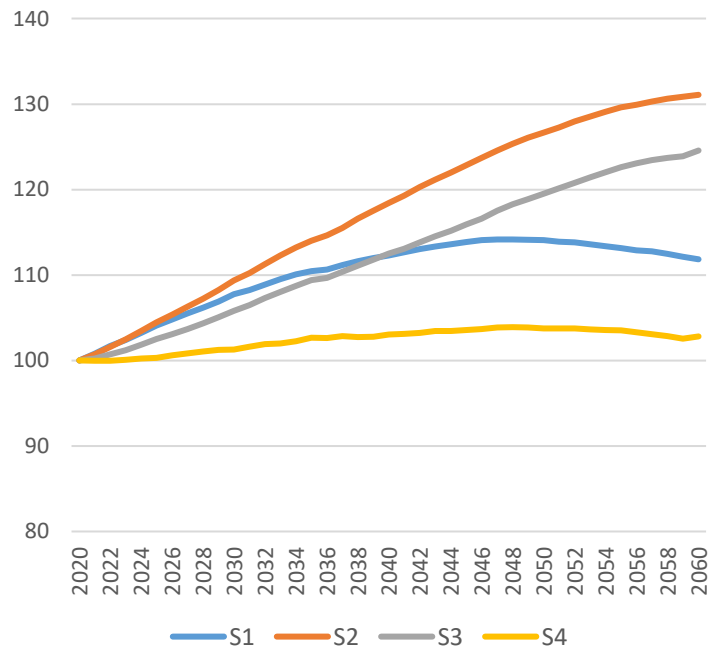


## Health Care Expenditure by Gender, Age and Education

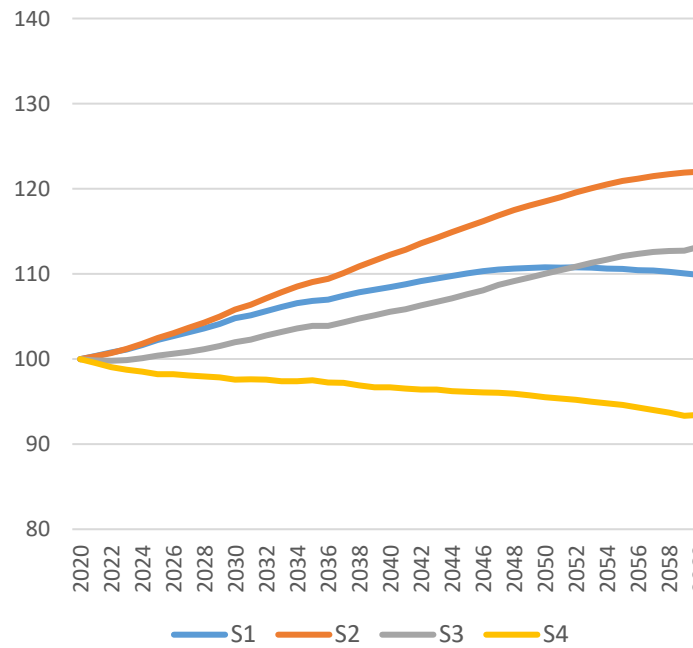


Note: XXX.

## Total Health Care Expenditure



## Health Care Cost per Capita



Note: XXX.

- High uncertainty in projections of future HCE – microsimulation useful tool for what-if and sensitivity analysis
- Without increases in life expectancy, population ageing has a comparatively modest impact on long-term cost dynamics, especially when factoring in composition effects due to the educational expansion
- Increases in life-expectancy double the impact of ageing on HCE. Uncertainty, how compression of morbidity (and accounting for end of life costs) can mitigate effects
- Future HCE very sensitive to assumptions on morbidity by age and extent to which socio-economic factors lead to persistent differences in health outcomes
- Policies that specifically reduce the above-average healthcare costs of the low-skilled can significantly contribute to counteract cost dynamic