Pseudo-cohort analysis of British smoking data

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Why research about smoking?

- Smoking largest cause of preventable deaths in UK
- Main contributor to higher death rates in the **manual** compared with **non-manual** group

Analysis

- Previous method:
  time trends

- New method:
  Pseudo-cohort analysis

What is pseudo-cohort analysis?

- Cohort analysis
  - panel data
  - same individual

- Pseudo-cohort analysis
  - cross-sectional data
  - average experience of a given cohort

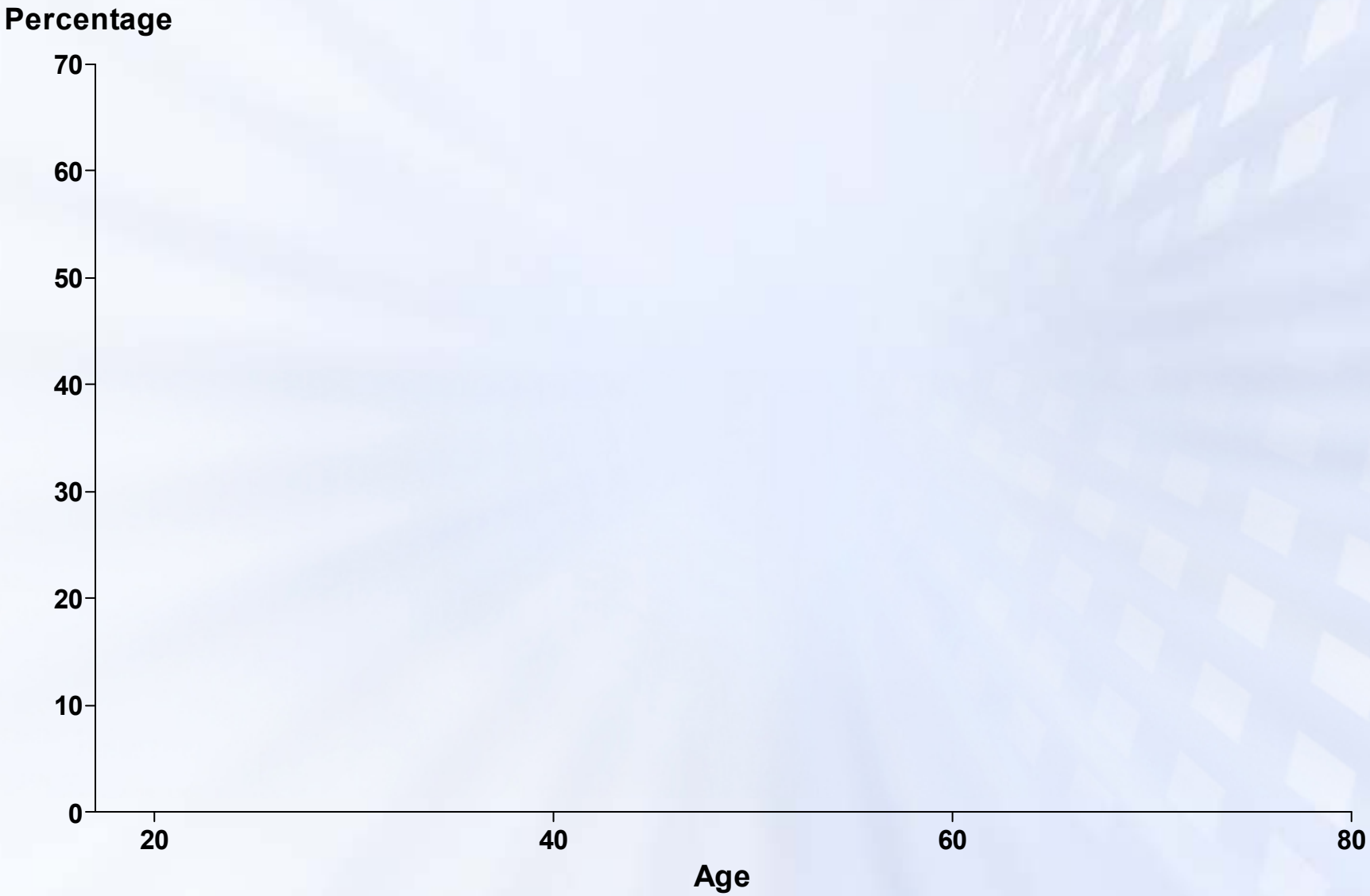
- For example
  - aged 20 to 25 in a 1980 survey
  = 21 to 26 in 1981
  = 22 to 27 in 1982
  = 44 to 49 in 2004.

General Household Survey

- High quality
- Cross-sectional survey
- Great Britain
- Annual data from 1972
- Government source of smoking data

- Large-scale (364,000 in this study)

Smoking among men



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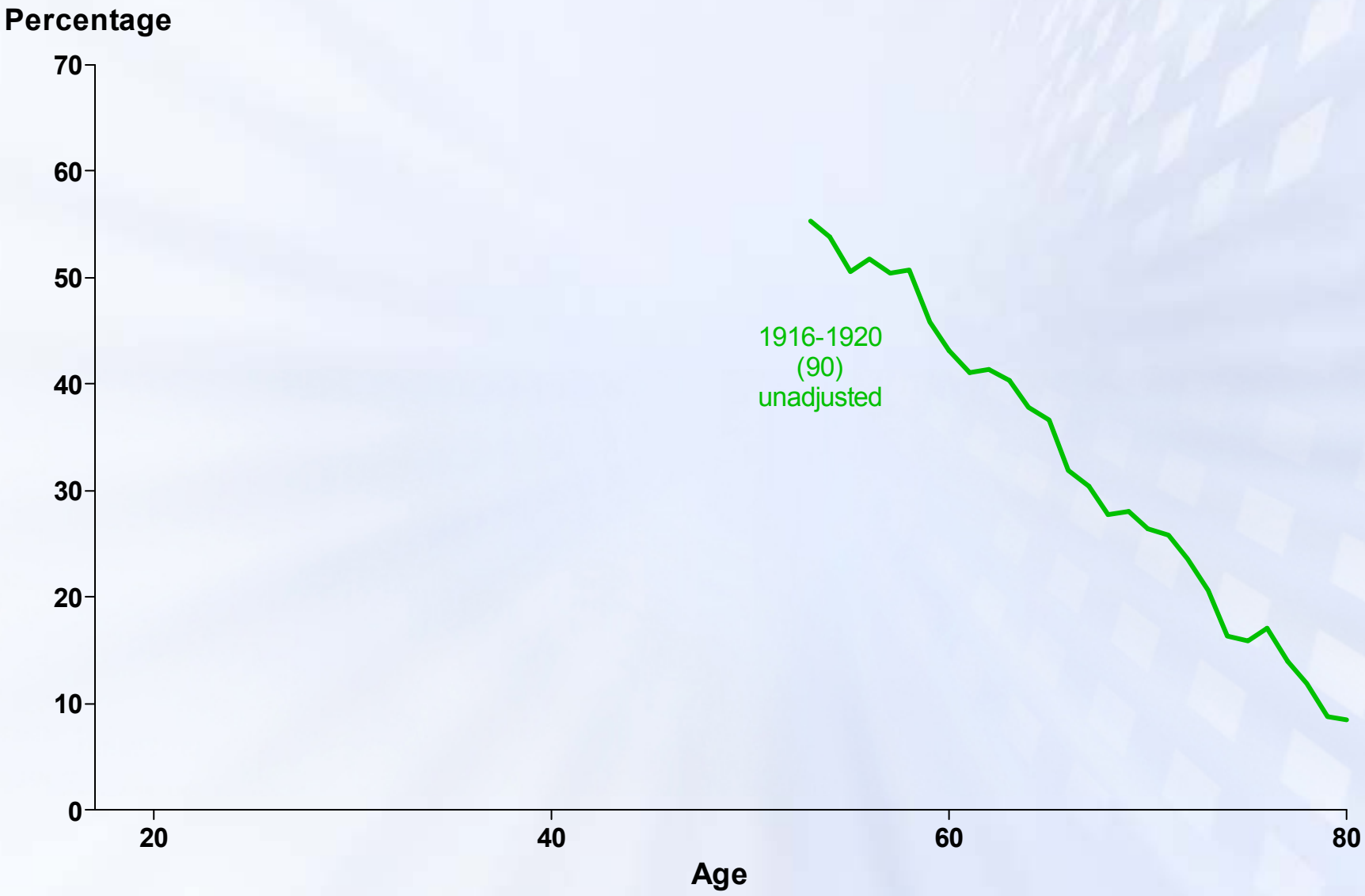

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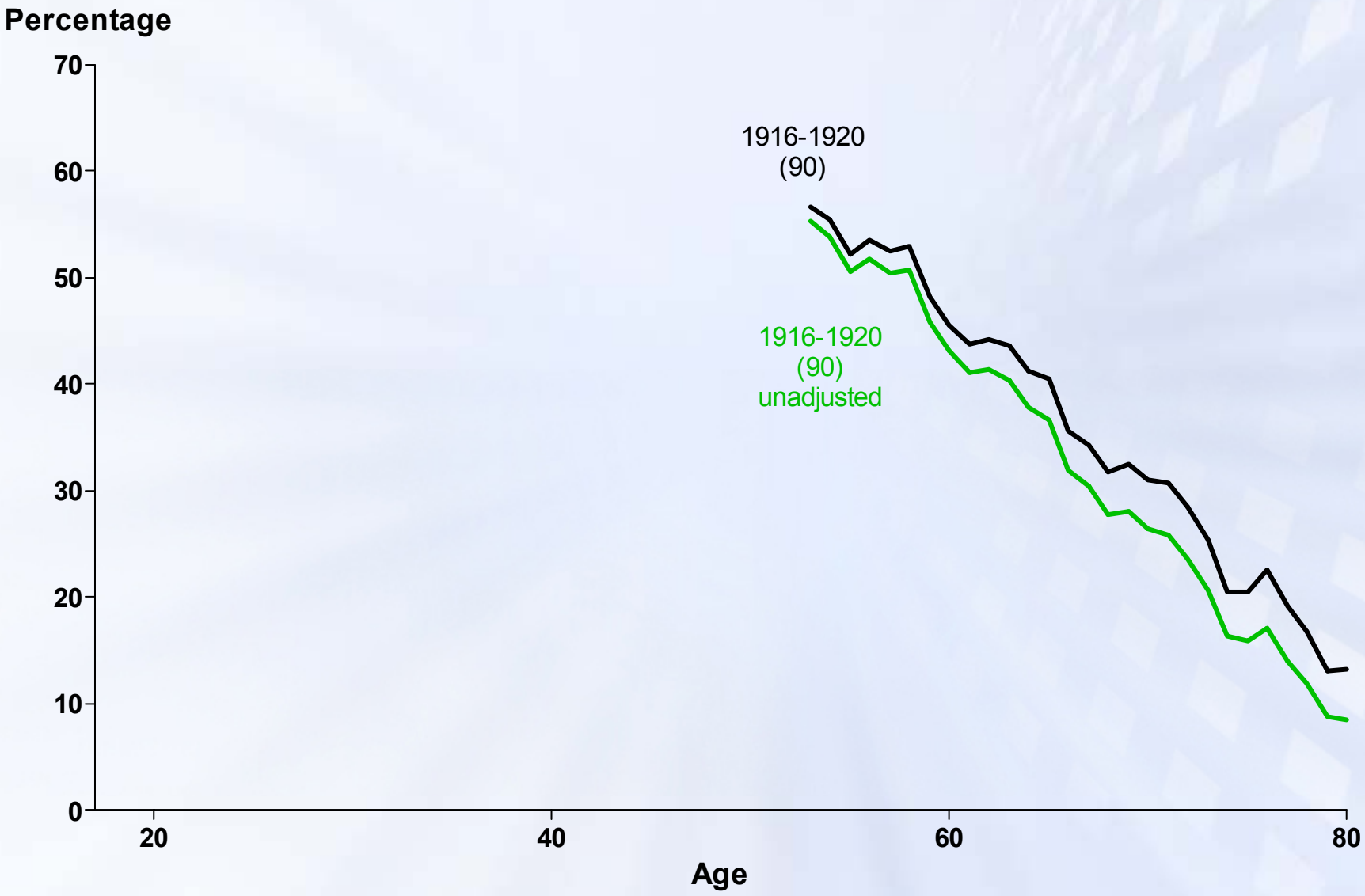

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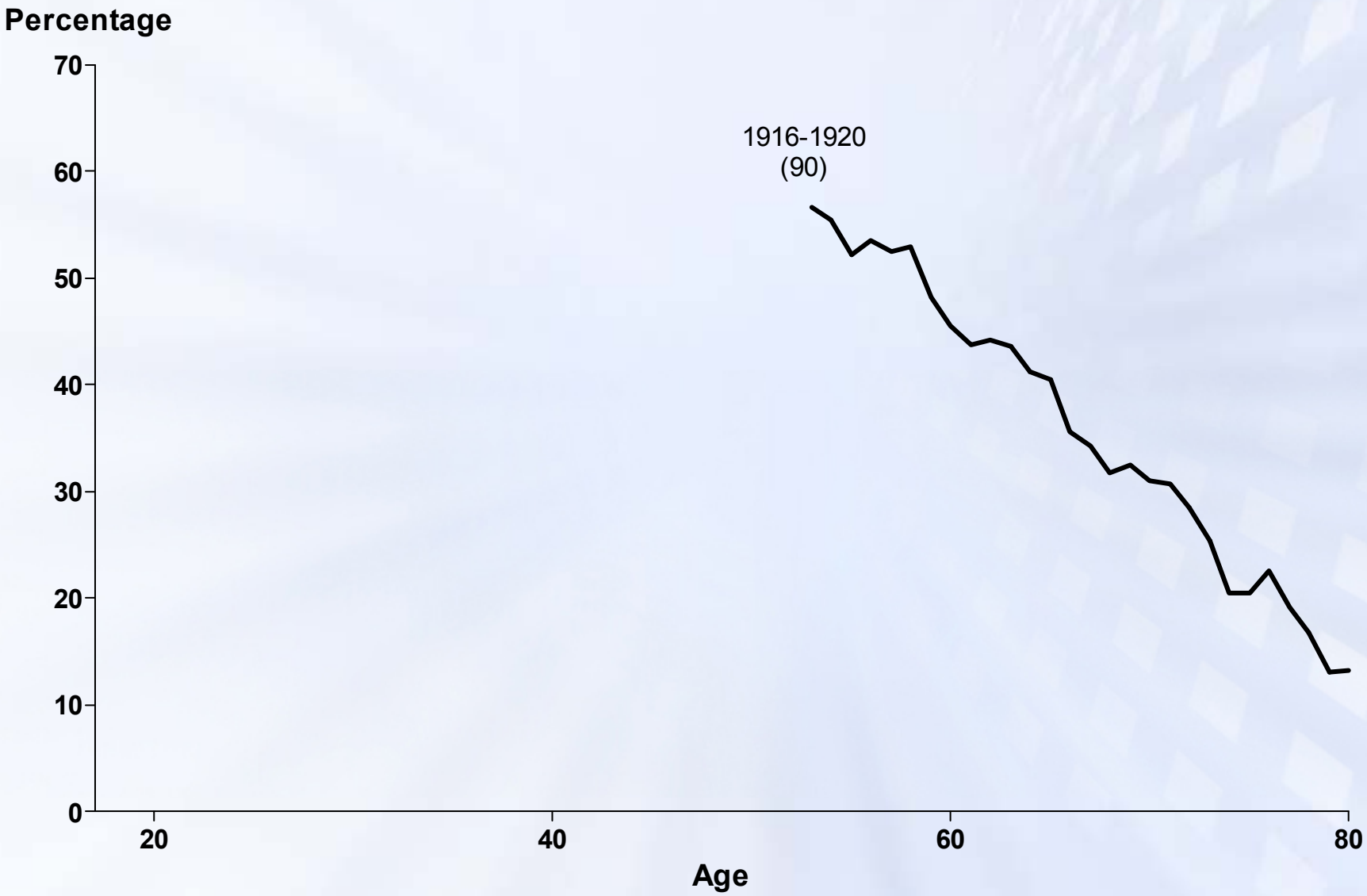

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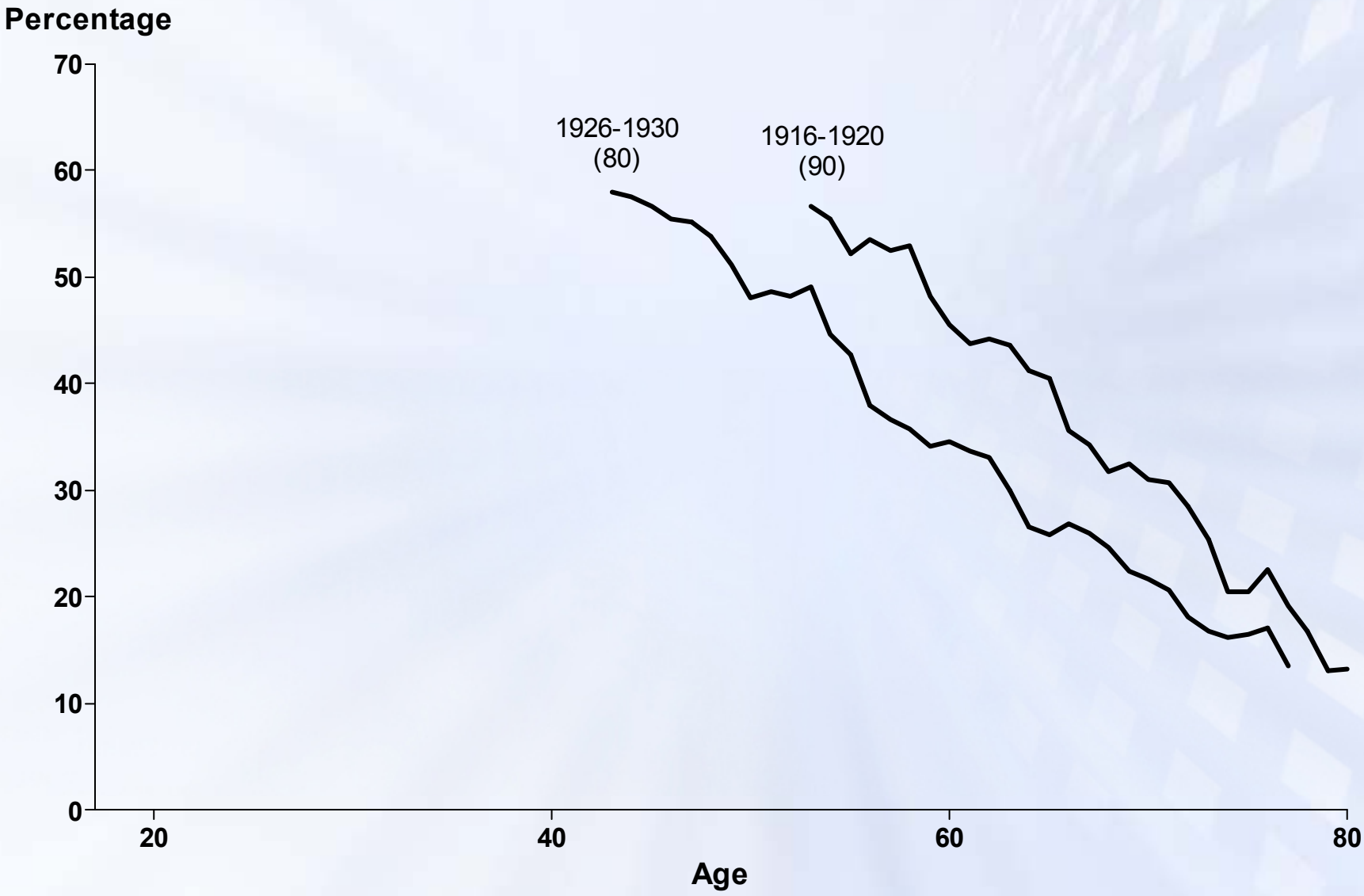

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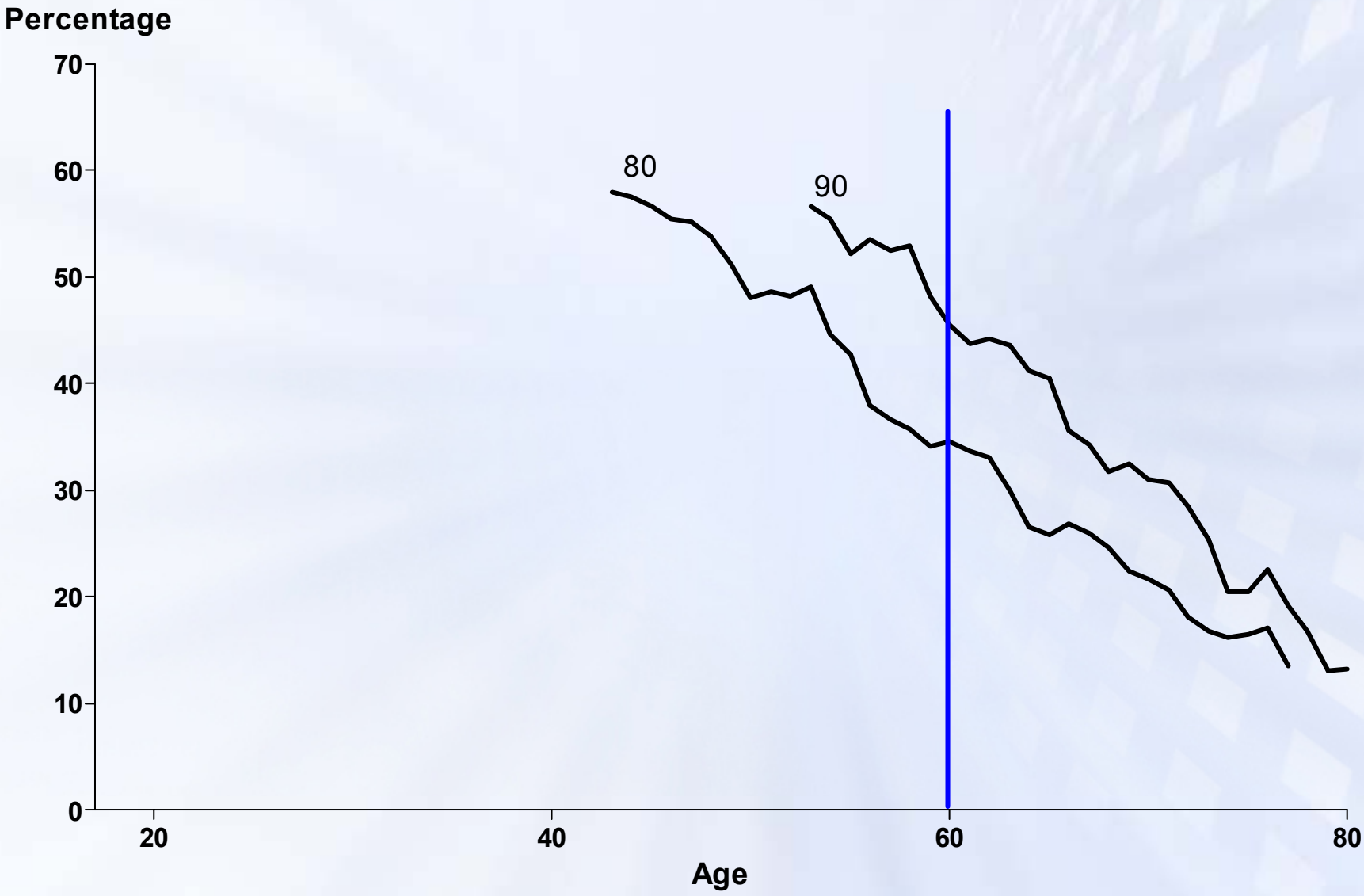

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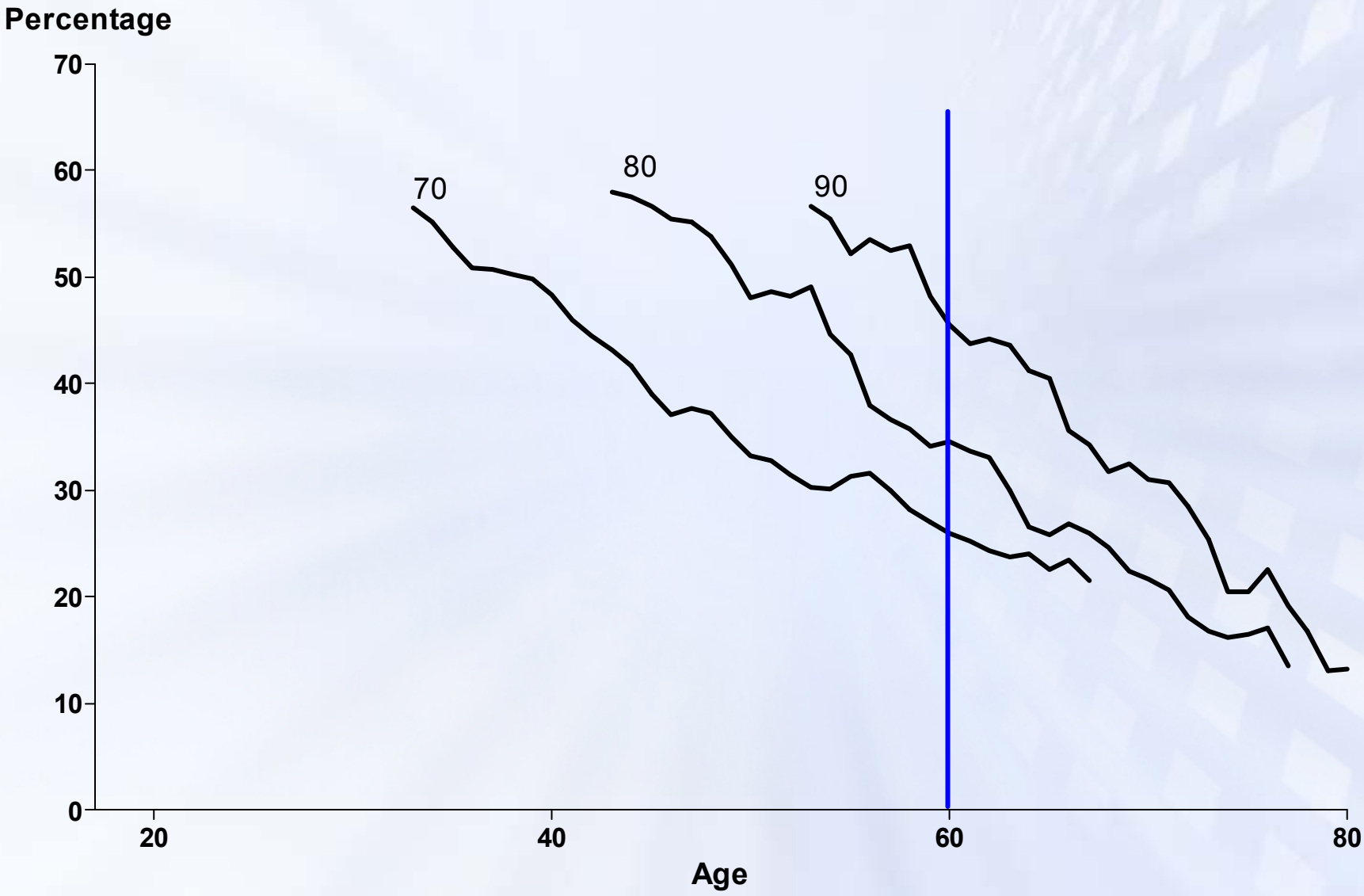

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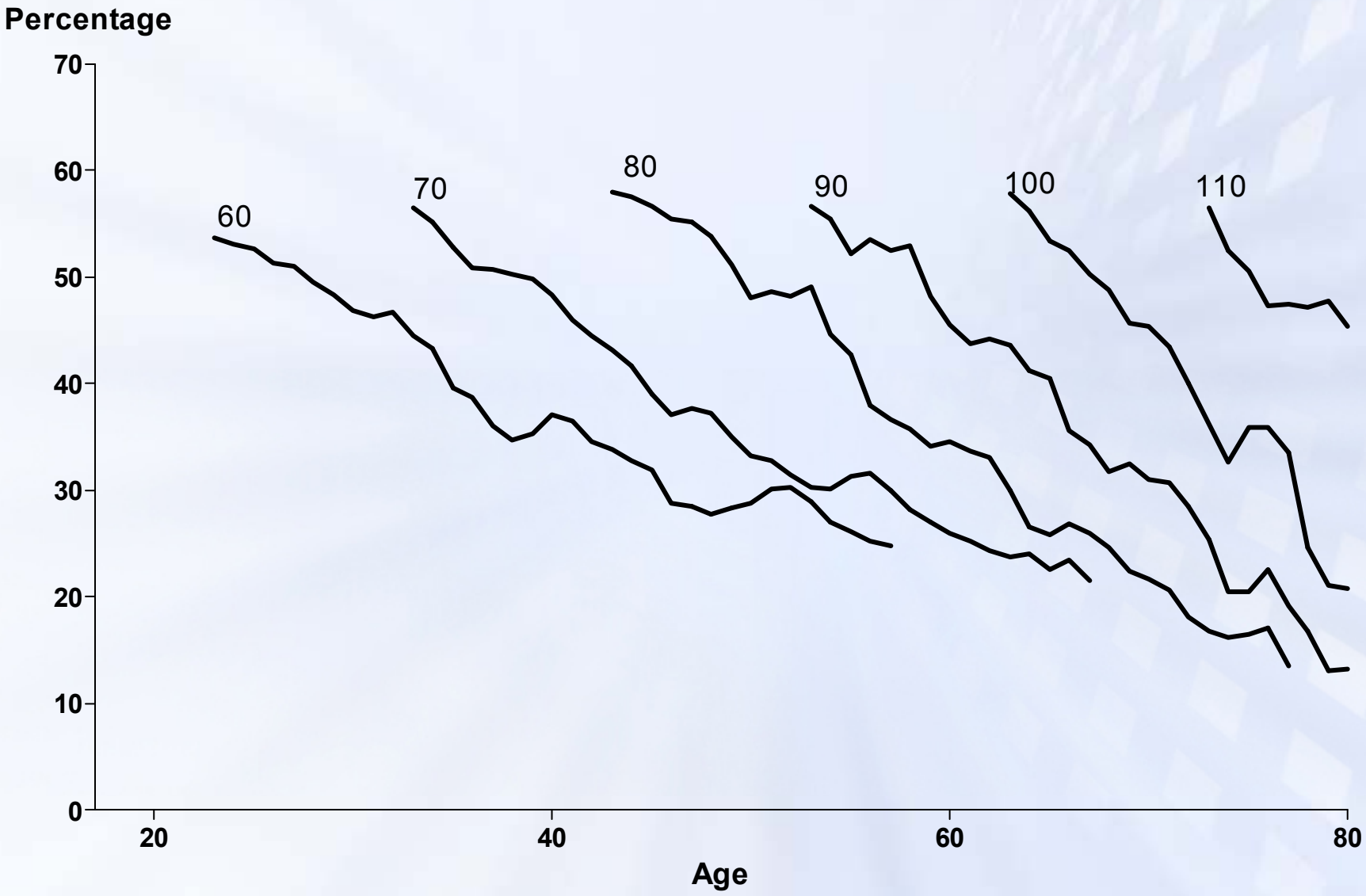

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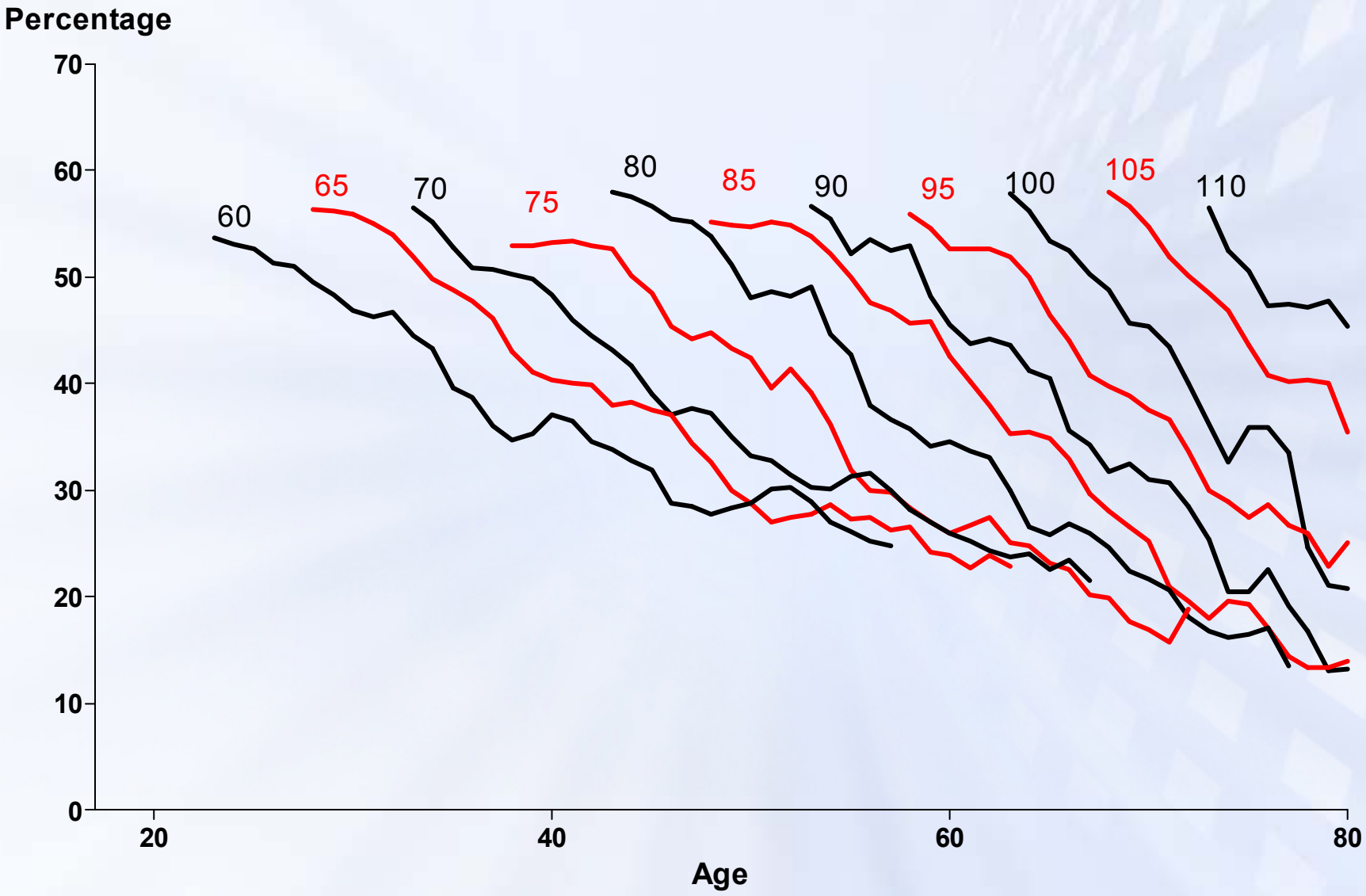

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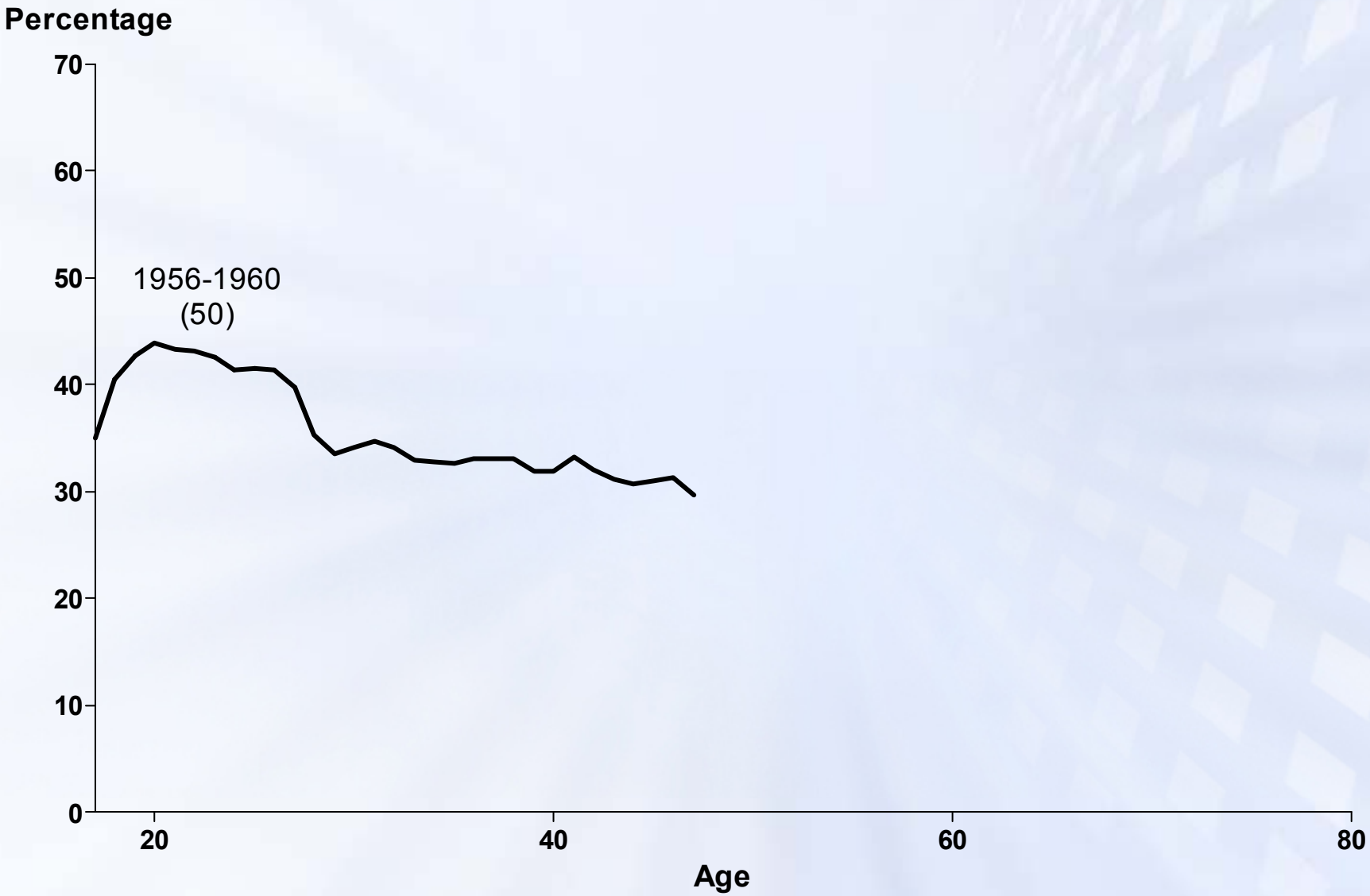

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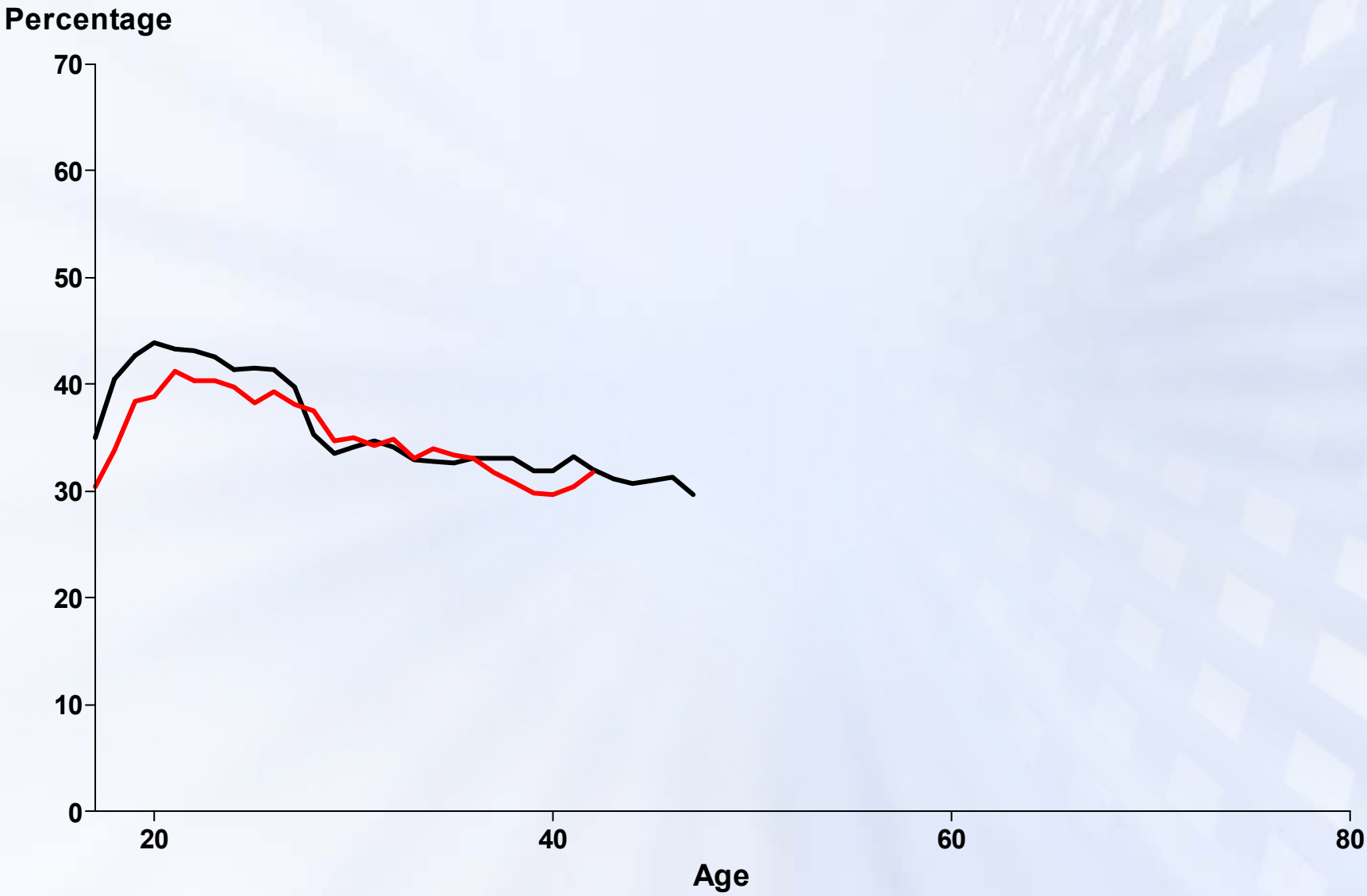

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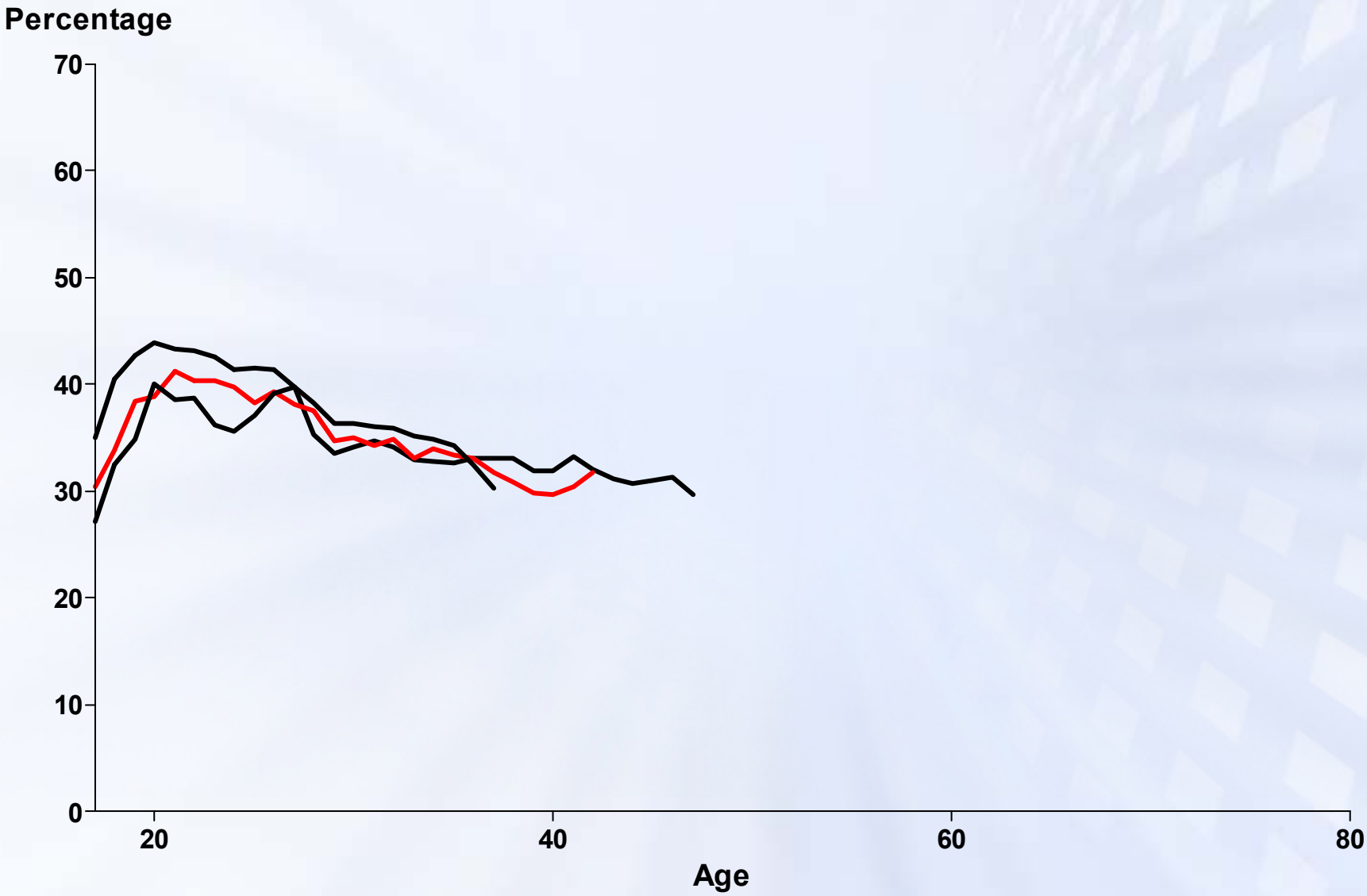

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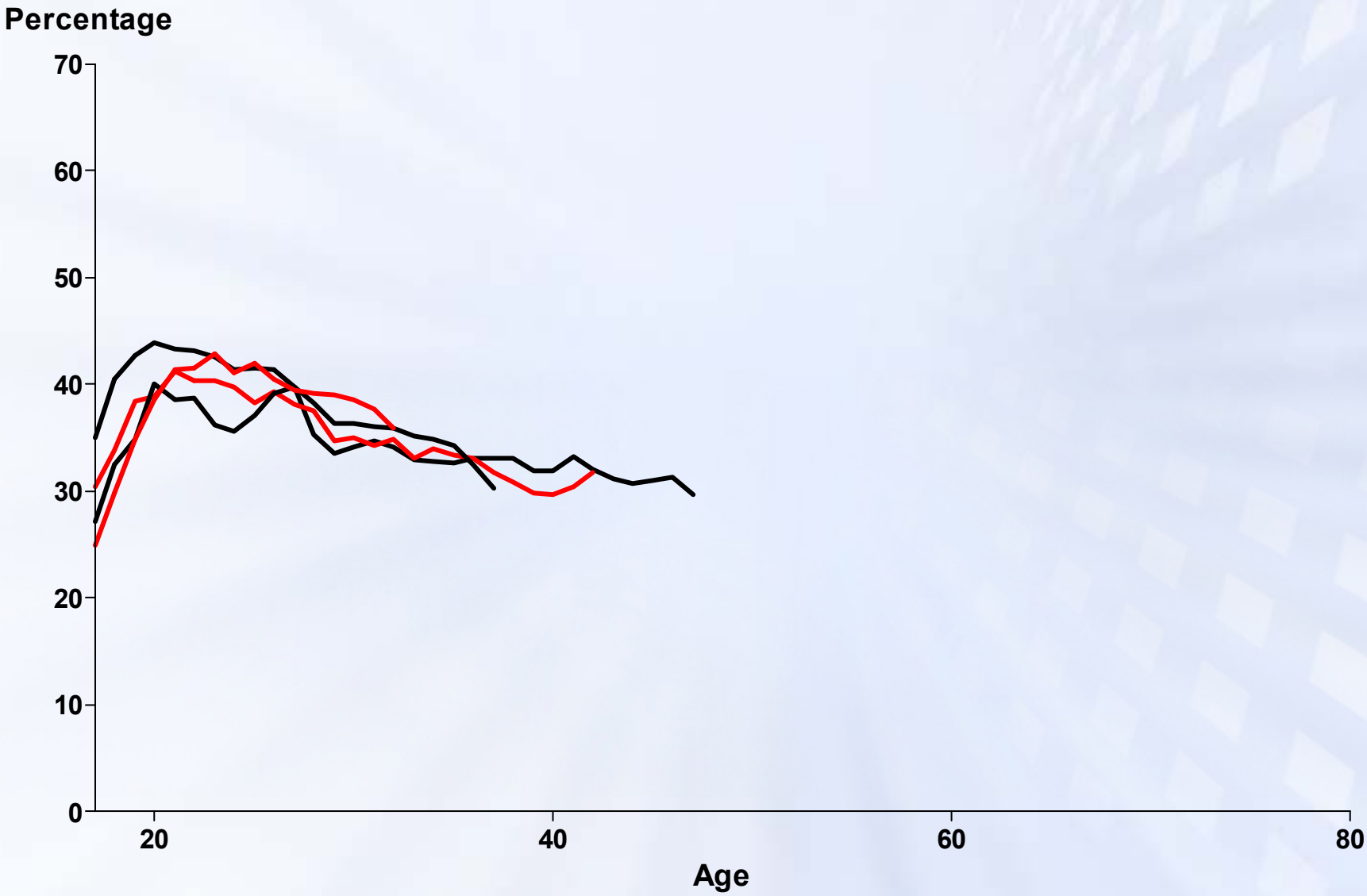

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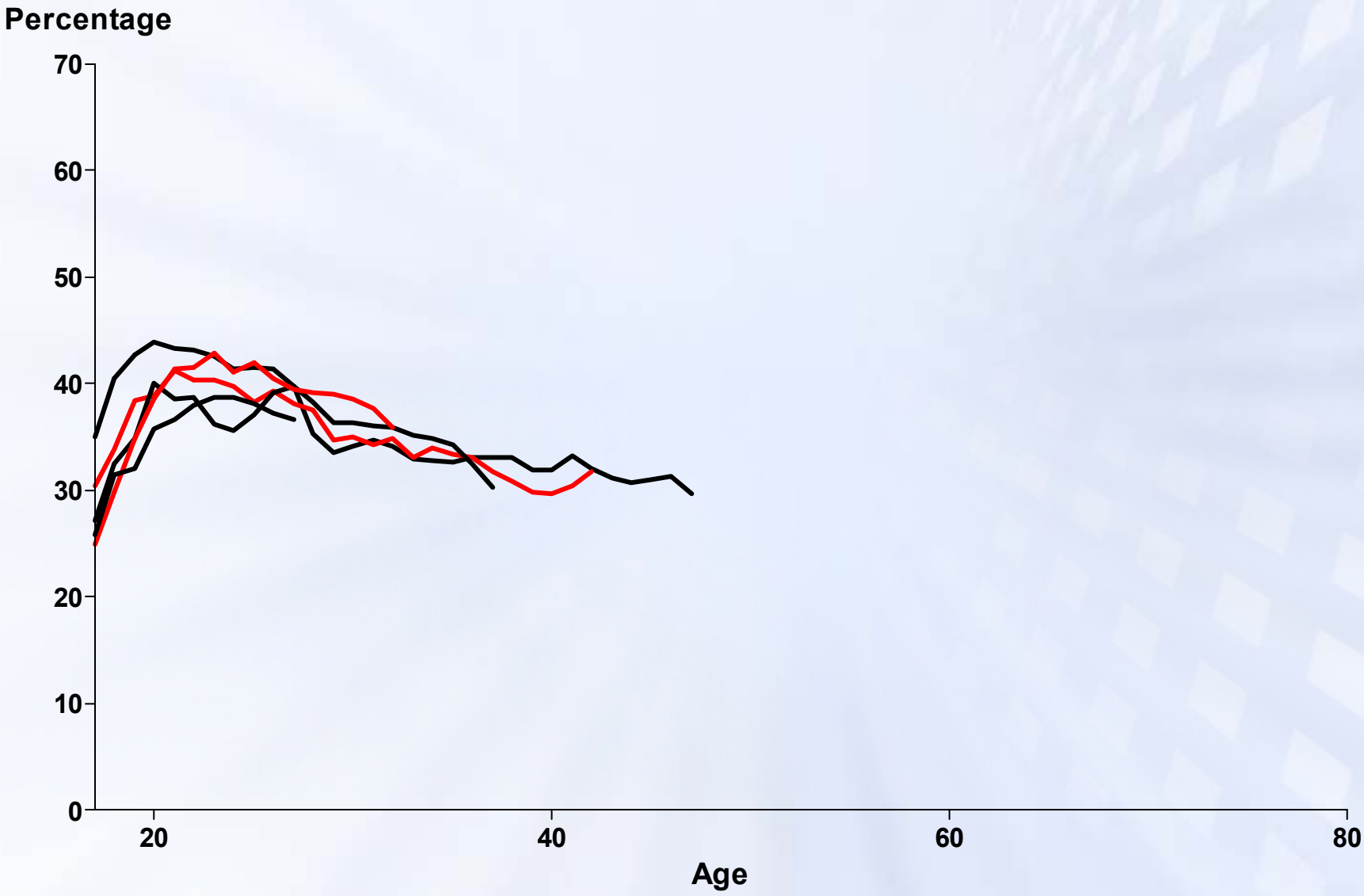

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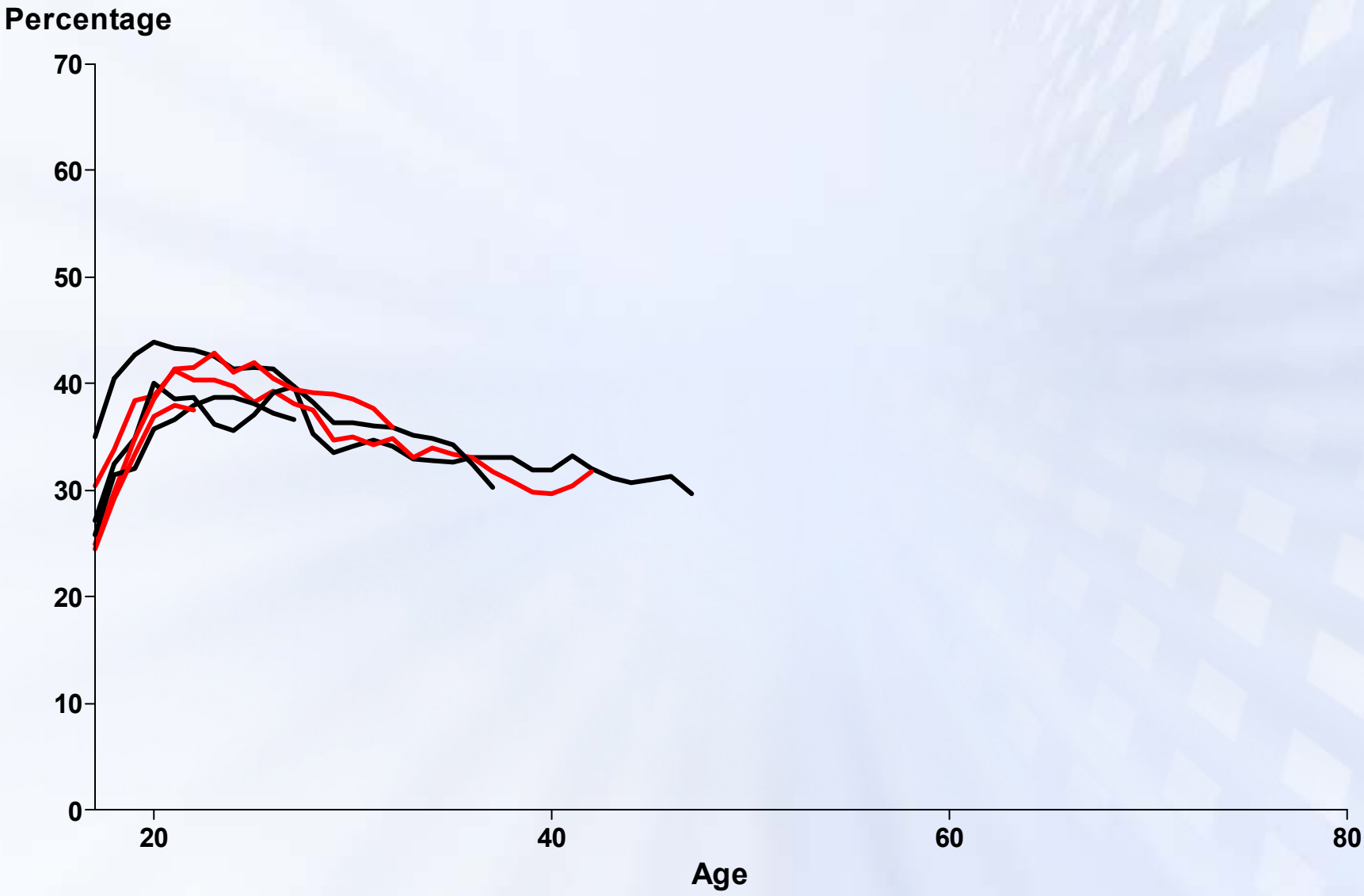

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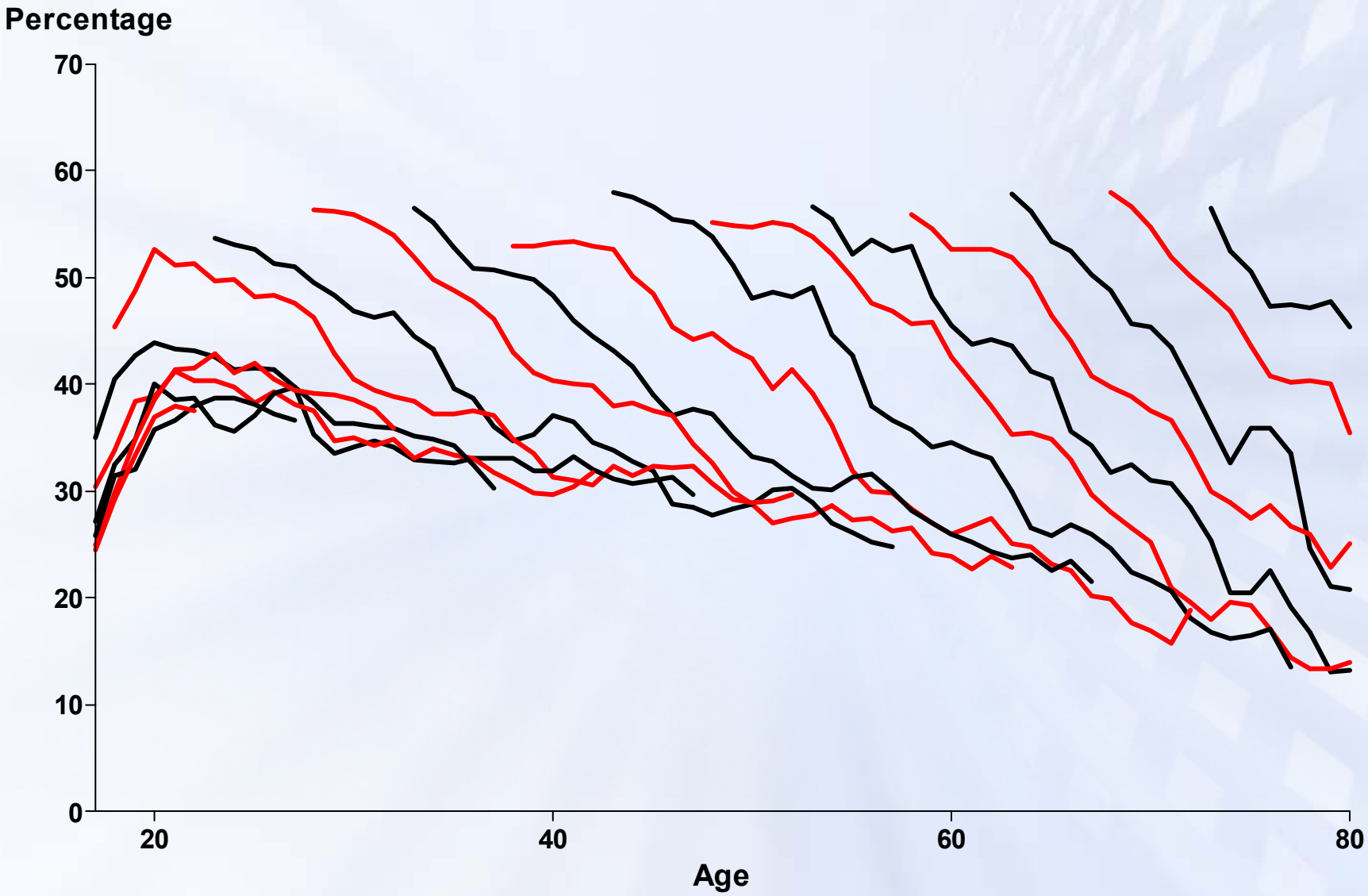

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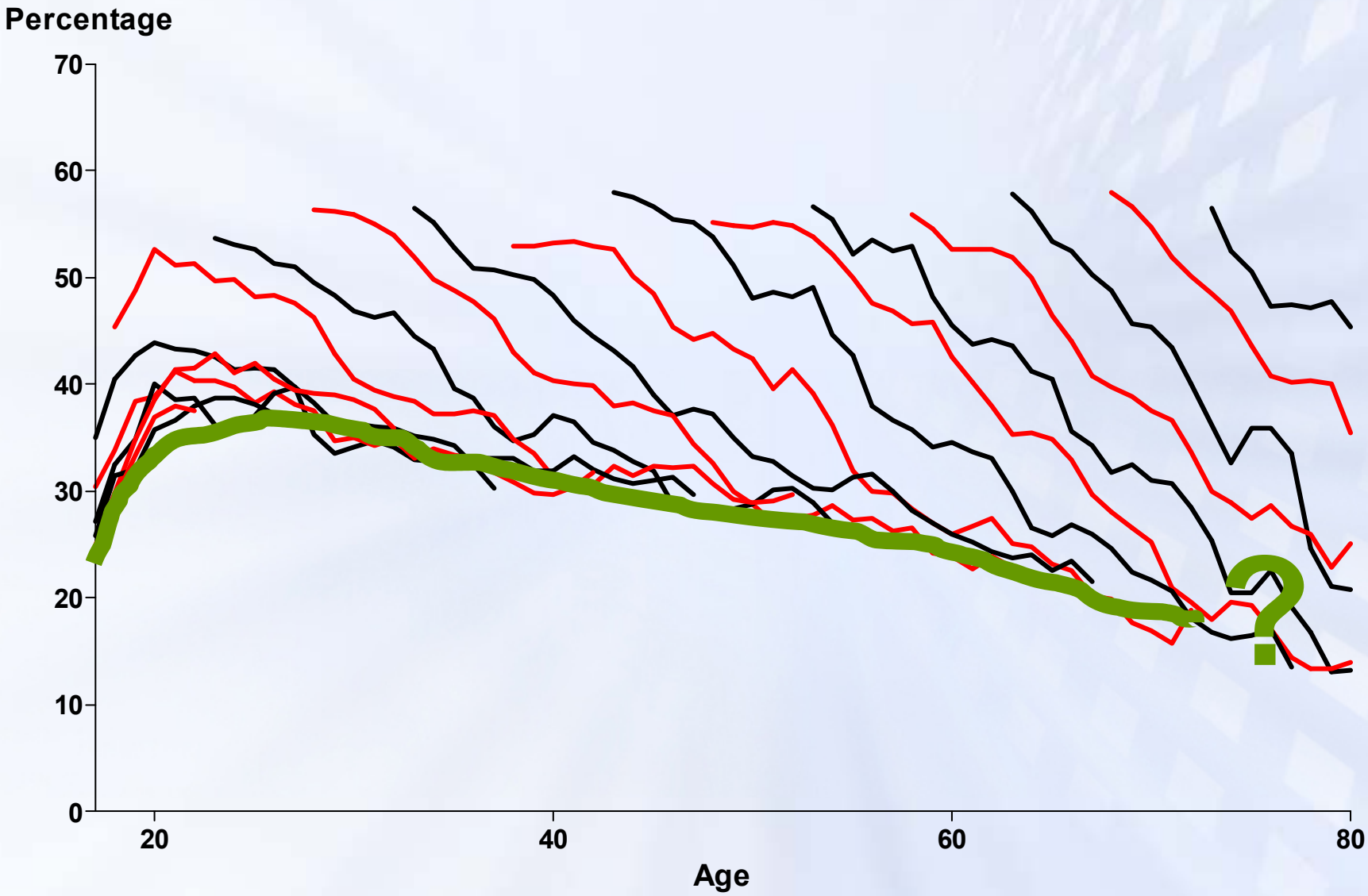
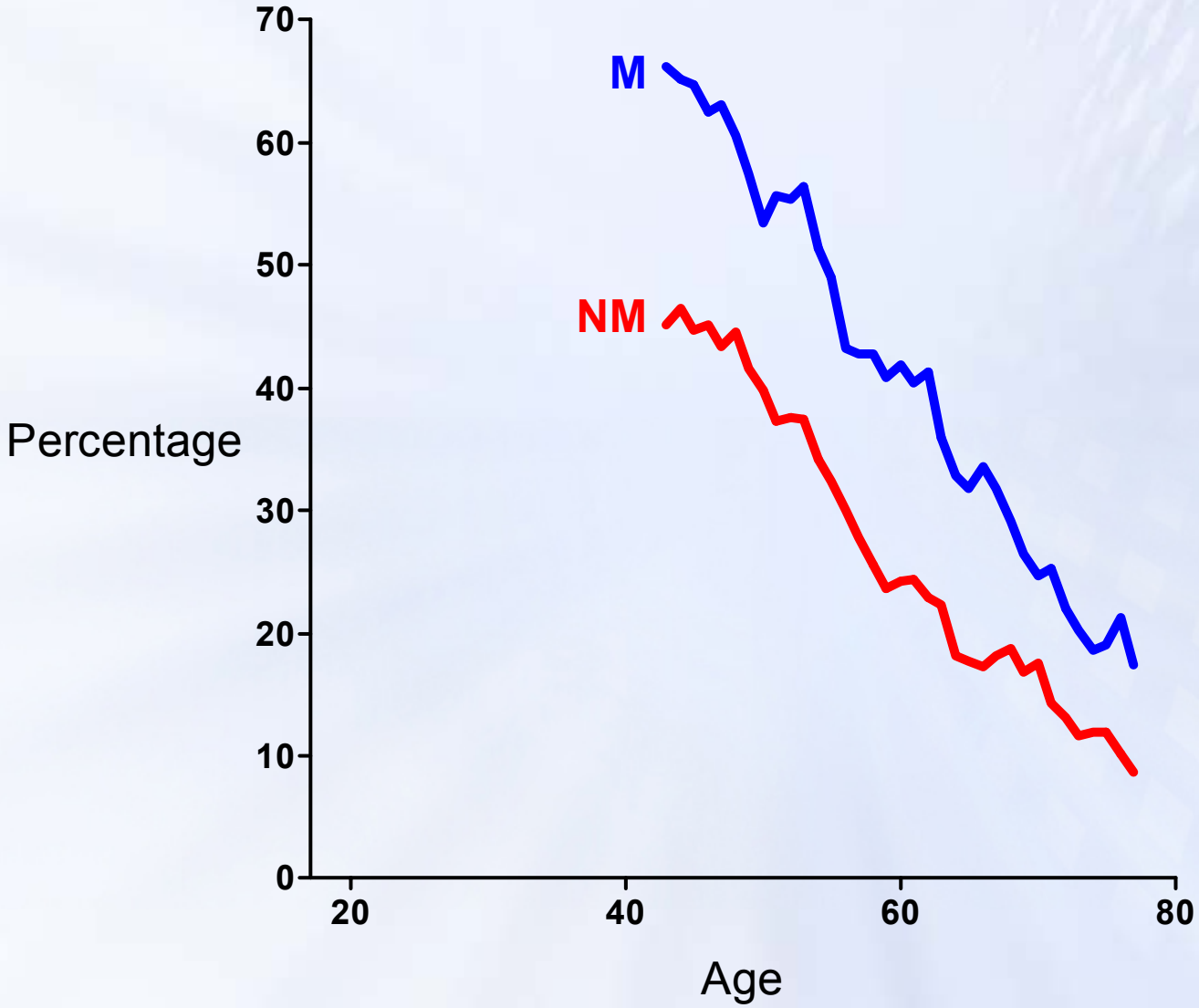
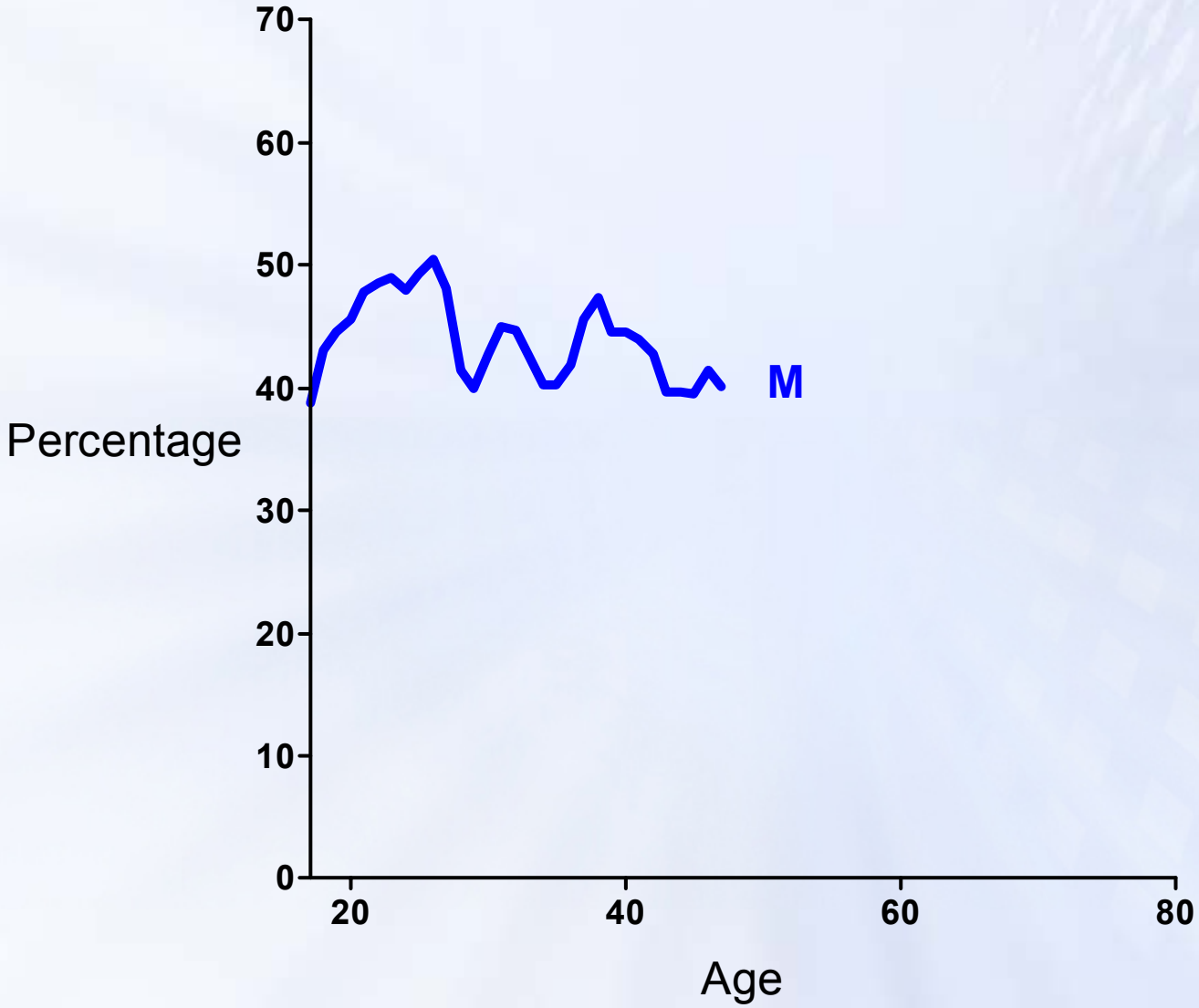


Smoking among men born about 80 years ago



Smoking among men born about 50 years ago



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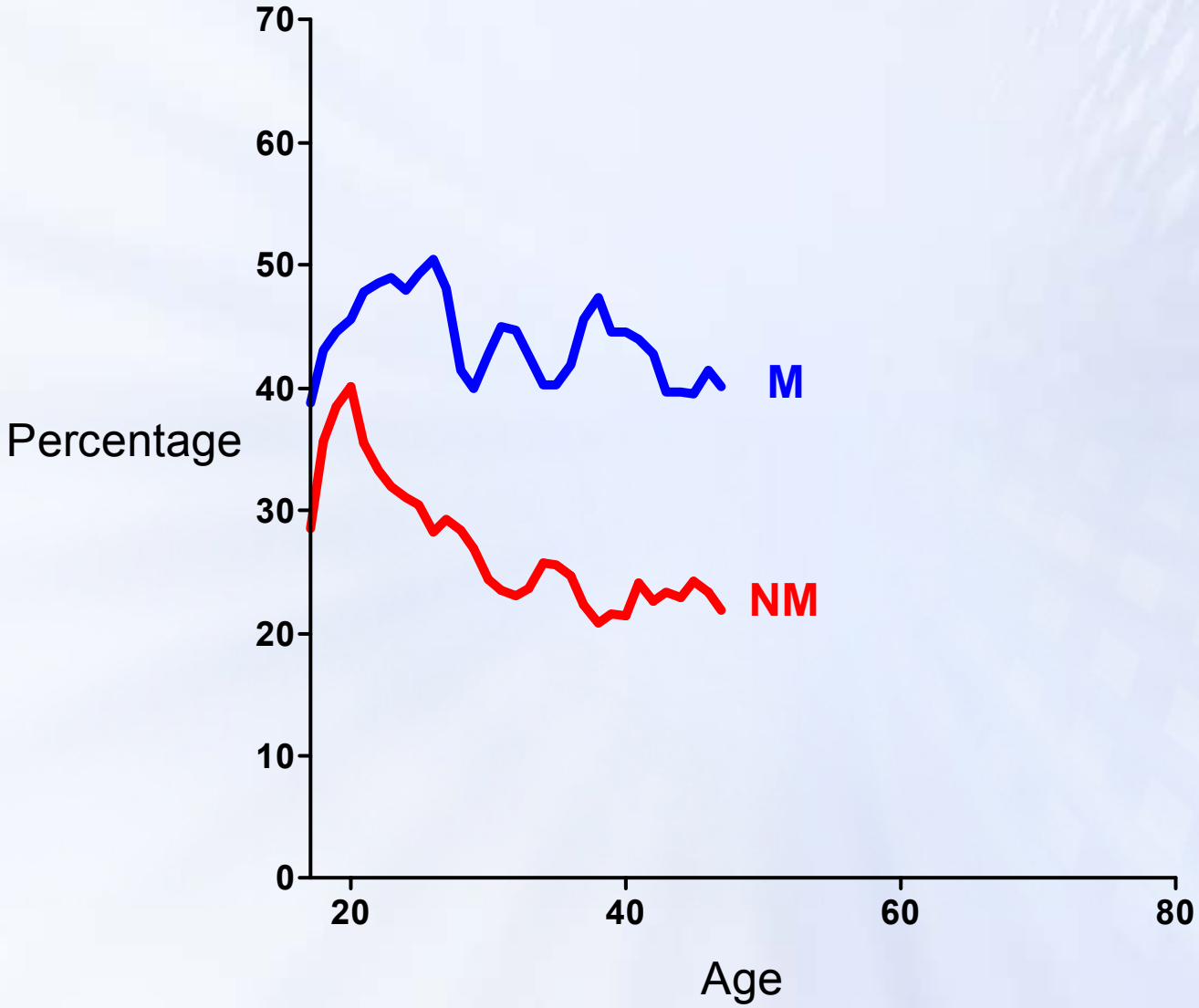


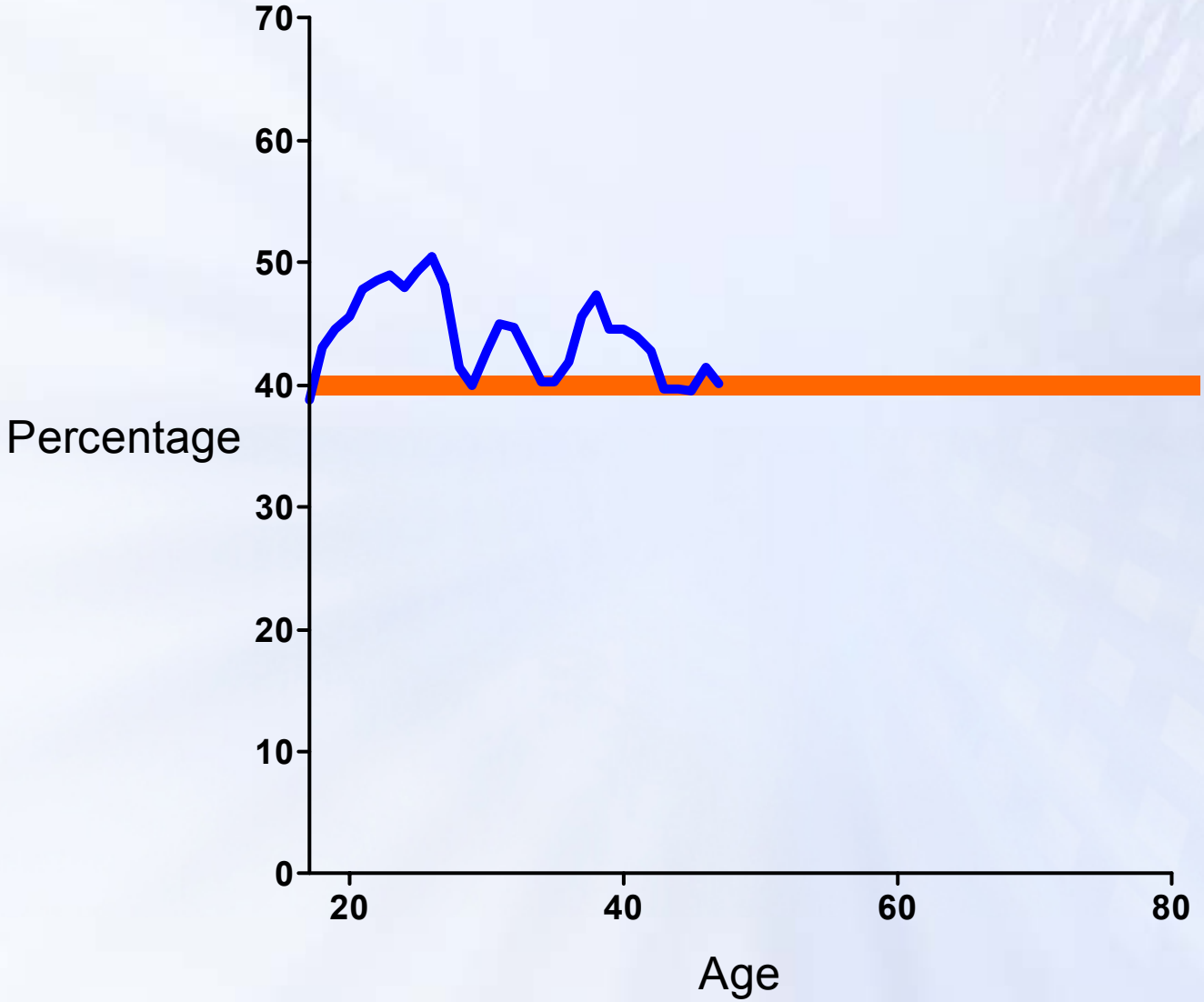
Predicting future trends

- Future predictions unreliable
- Useful to theorise

- Unknowns:

1) What happens when current cohorts age.
2) Those born after 1985

Possible future trends?



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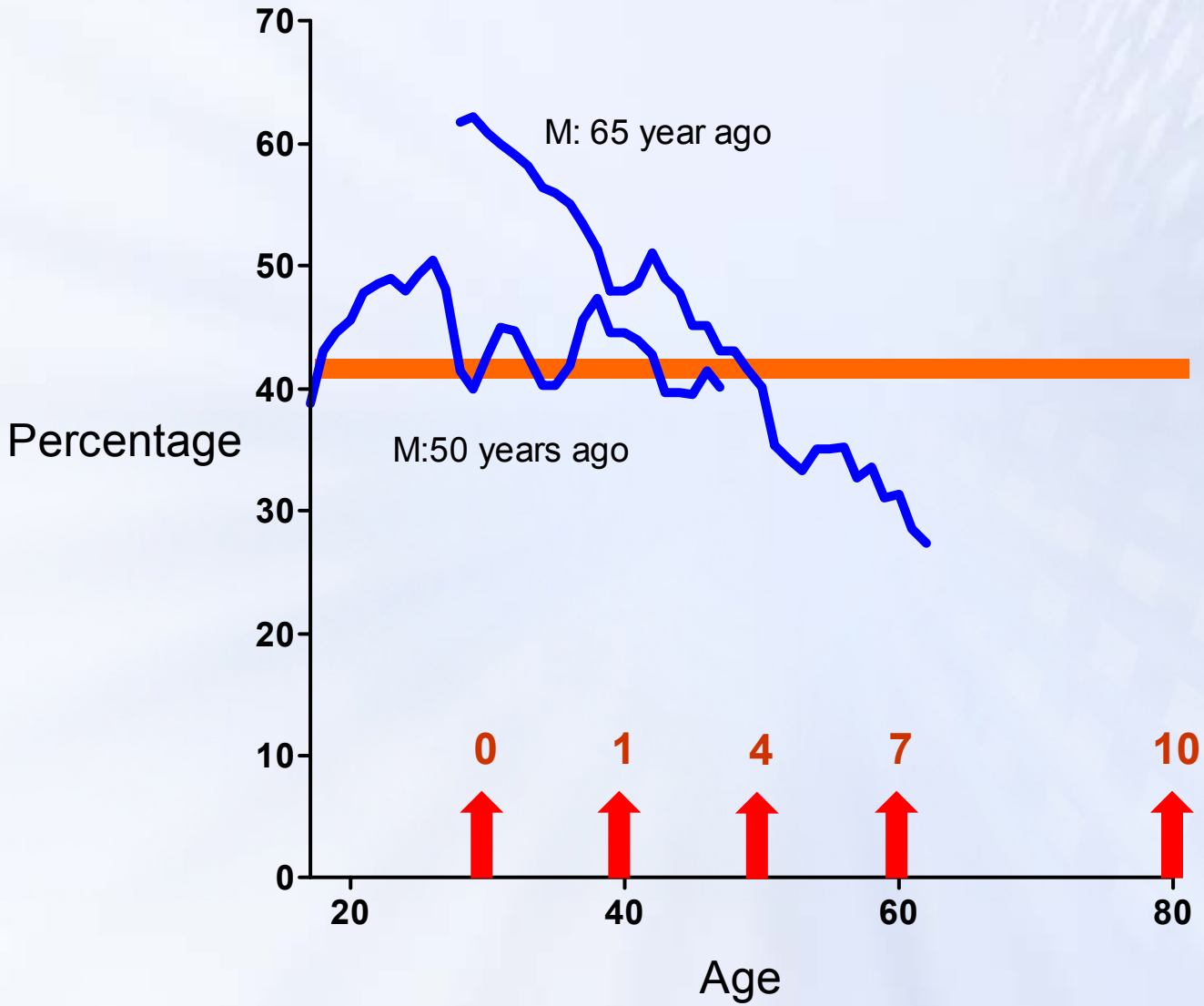

Socio-economic inequalities – main findings

Manual were always more likely to smoke than non-manual

- **People born in first half of the 20th century:**

High rates of taking up smoking

Manual & non-manual gave up at similar rates

- **People born in second half of the 20th century:**

Less likely to start smoking

Manual & non-manual gave up at different rates

Manual smokers - vast majority don't give up

Pseudo-cohort analysis:

- Tells us much more than just time trend data
- Disentangles impact of earlier from recent cohorts
- Throws light on future smoking trends

Publications

- **Davy M** (2006) Time and generational trends in smoking among men and women in Great Britain, 1972-2003/04, *Health Statistics Quarterly* 32, pp.35-43.

- **Davy M** (2007) Socio-economic inequalities in smoking: an examination of generational trends in Great Britain, *Health Statistics Quarterly* 34.
  (To be published on the 24th May 07)

- www.statistics.gov.uk/statbase/Product.asp?vlnk=6725