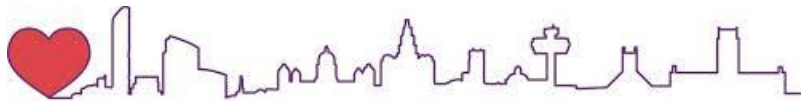


Atrial fibrillation and stroke in older adults living in care homes

*Analysis of prevalence, treatment and outcomes
using the SAIL Databank*

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Julian Halcox, Daniel Harris, Joe Hollinghurst, Sarah Rodgers, Gregory Lip



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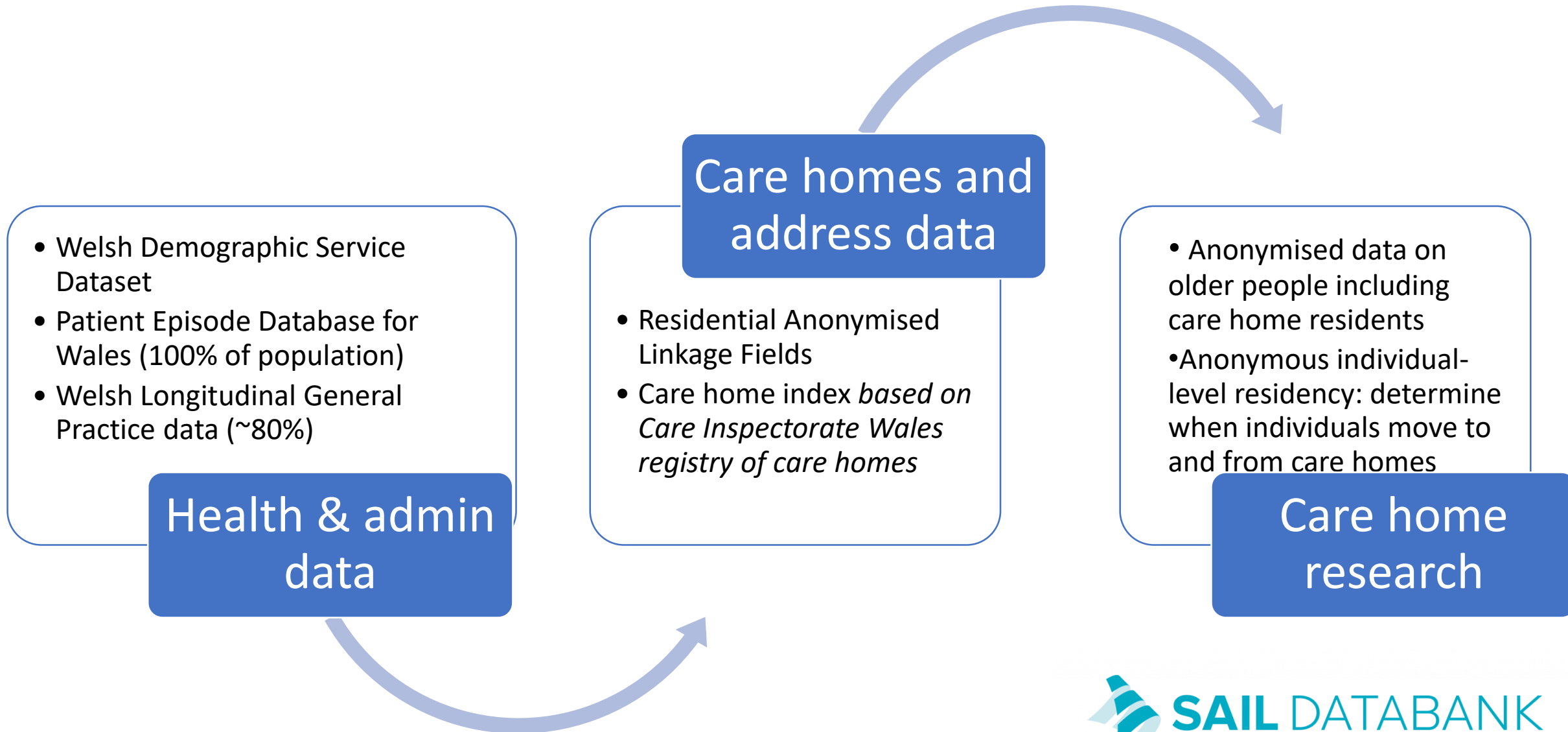


Population Data Science
at Swansea University



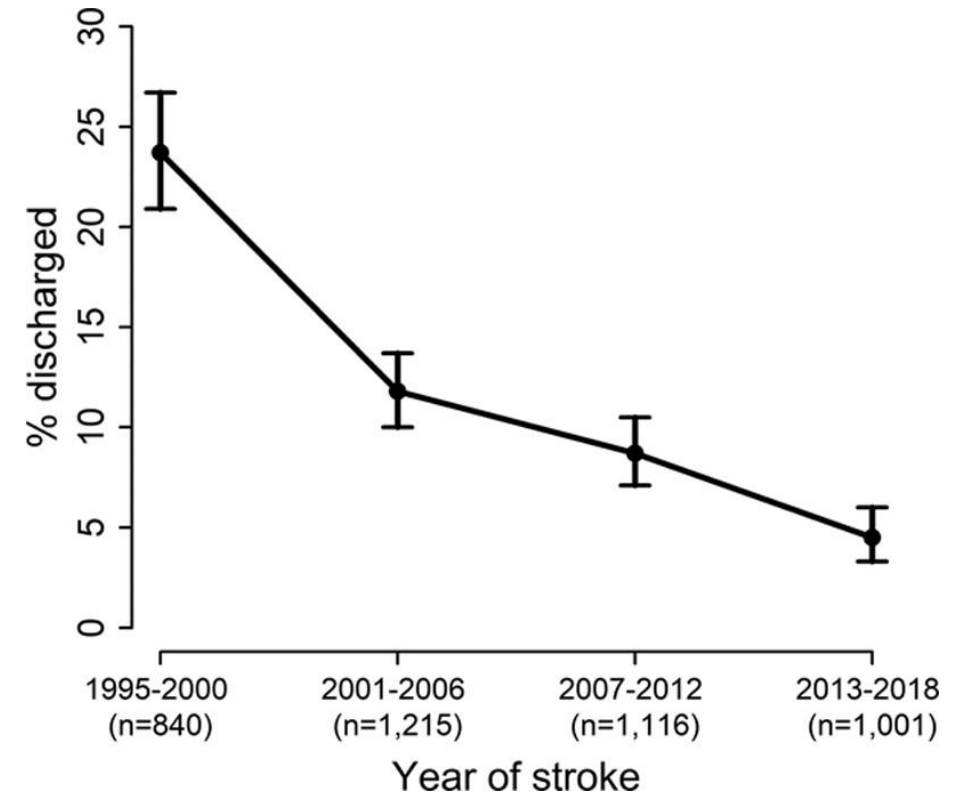
HDRUK
Health Data Research UK

Data for care home residents in the SAIL Databank



Stroke and care homes

- Residents with stroke may have higher levels of need
- In South London, a decline in the proportion of older people discharged from hospital to a care home was reported
- Gaps in epidemiological knowledge about stroke in older care home residents



Clery et al. Long-Term Trends in Stroke Survivors Discharged to Care Homes: The South London Stroke Register. *Stroke*. 2020;51(1):179-185.

Cohort definition and statistical analysis

- Age and sex-adjusted prevalence and incidence of stroke
- Generalised linear models to determine change over time
- Competing risk models to examine associations between prior stroke, incident stroke and mortality



Age



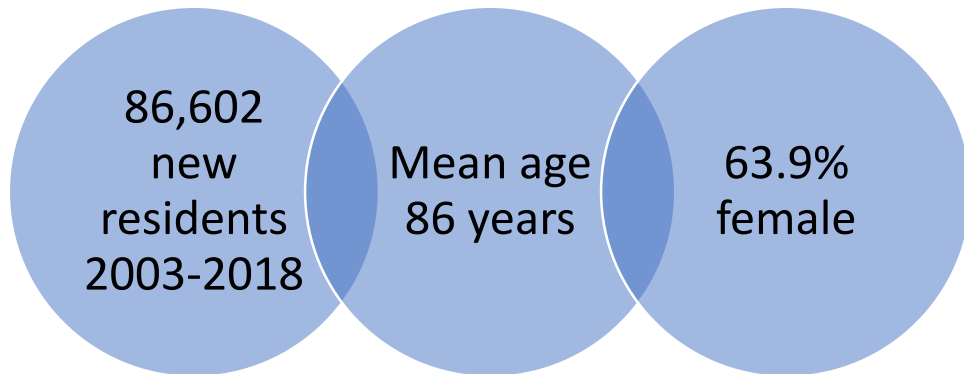
Prior GP
coverage



2003
to 2018

Stroke in older adults living in care homes in Wales

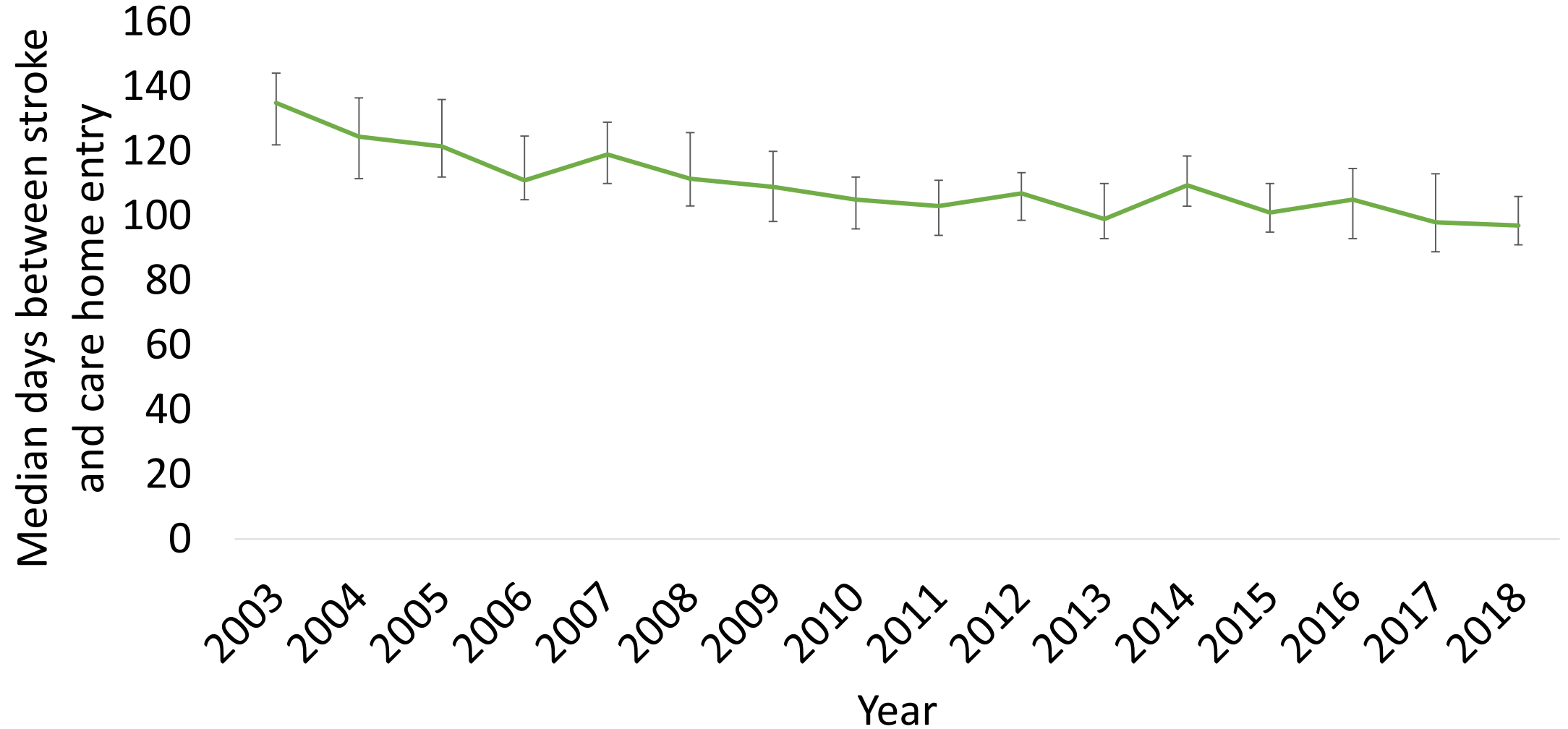
Cohort characteristics



- 7.0% stroke in the previous 12 months
 - 4.8% ischaemic stroke
 - 1.1% haemorrhagic stroke
 - 1.4% unspecified stroke
- 1.9% (n=1,653) experienced an incident stroke within 12-months after care home entry
- 30-day mortality after stroke was 49.3%

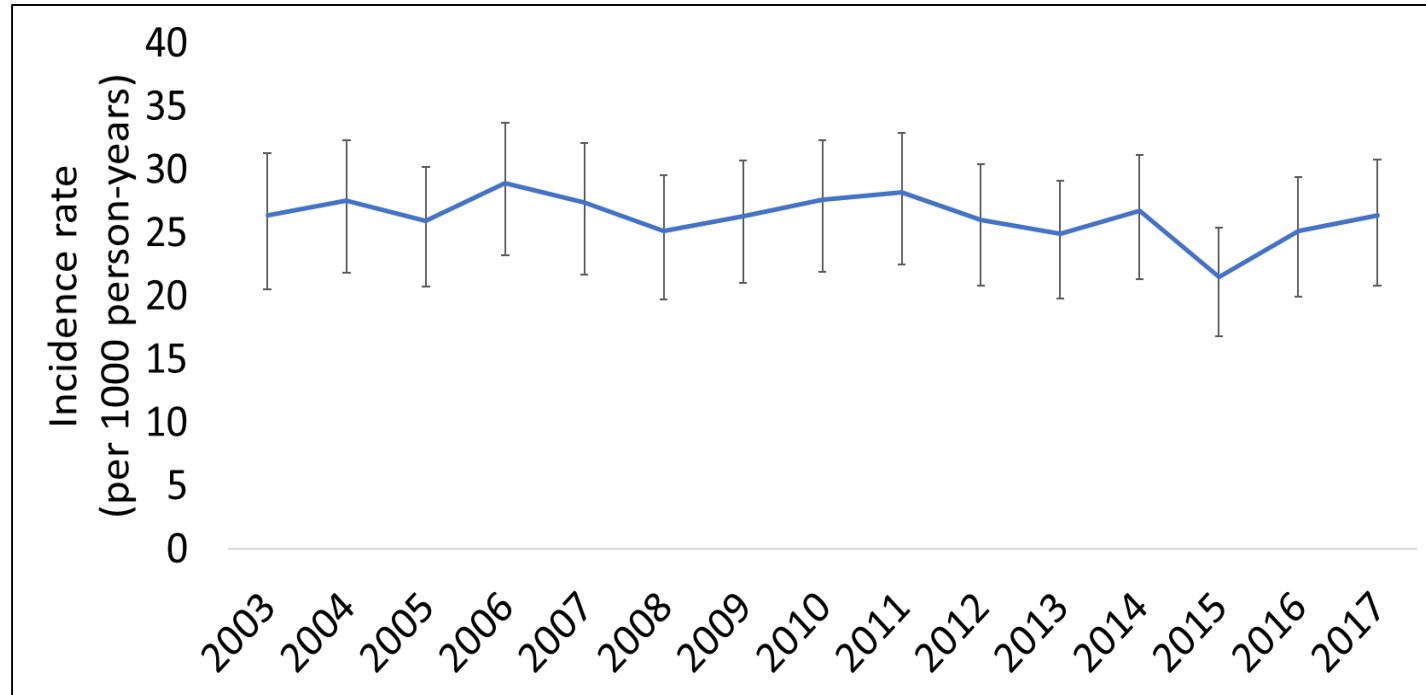
Harrison et al. Stroke in Older Adults Living in Care Homes: Results From a National Data Linkage Study in Wales
Journal of the American Medical Directors Association doi.org/10.1016/j.jamda.2022.05.003

Time between stroke and care home entry

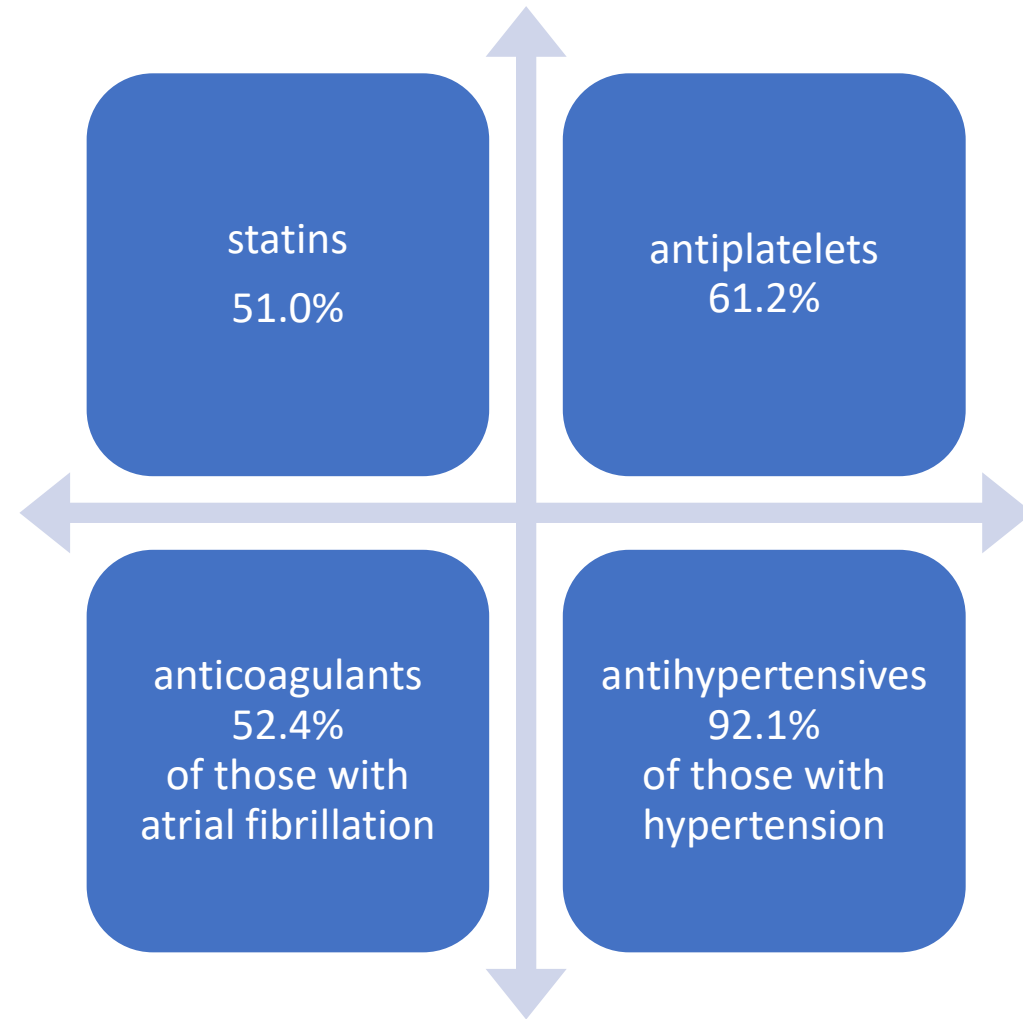


Incident stroke one-year after care home entry

- Incidence per 1000 person-years:
 - recurrent stroke: 47.1 (95% CI: 41.1, 54.0)
 - first-time stroke: 24.6 (95% CI: 23.4, 25.9)
- Prior stroke associated with a higher risk of:
 - incident stroke
adjusted sHR 1.83 (95% CI: 1.57, 2.13)
 - 30-day mortality after incident stroke
adjusted OR 2.18 (95% CI: 1.59, 2.98)

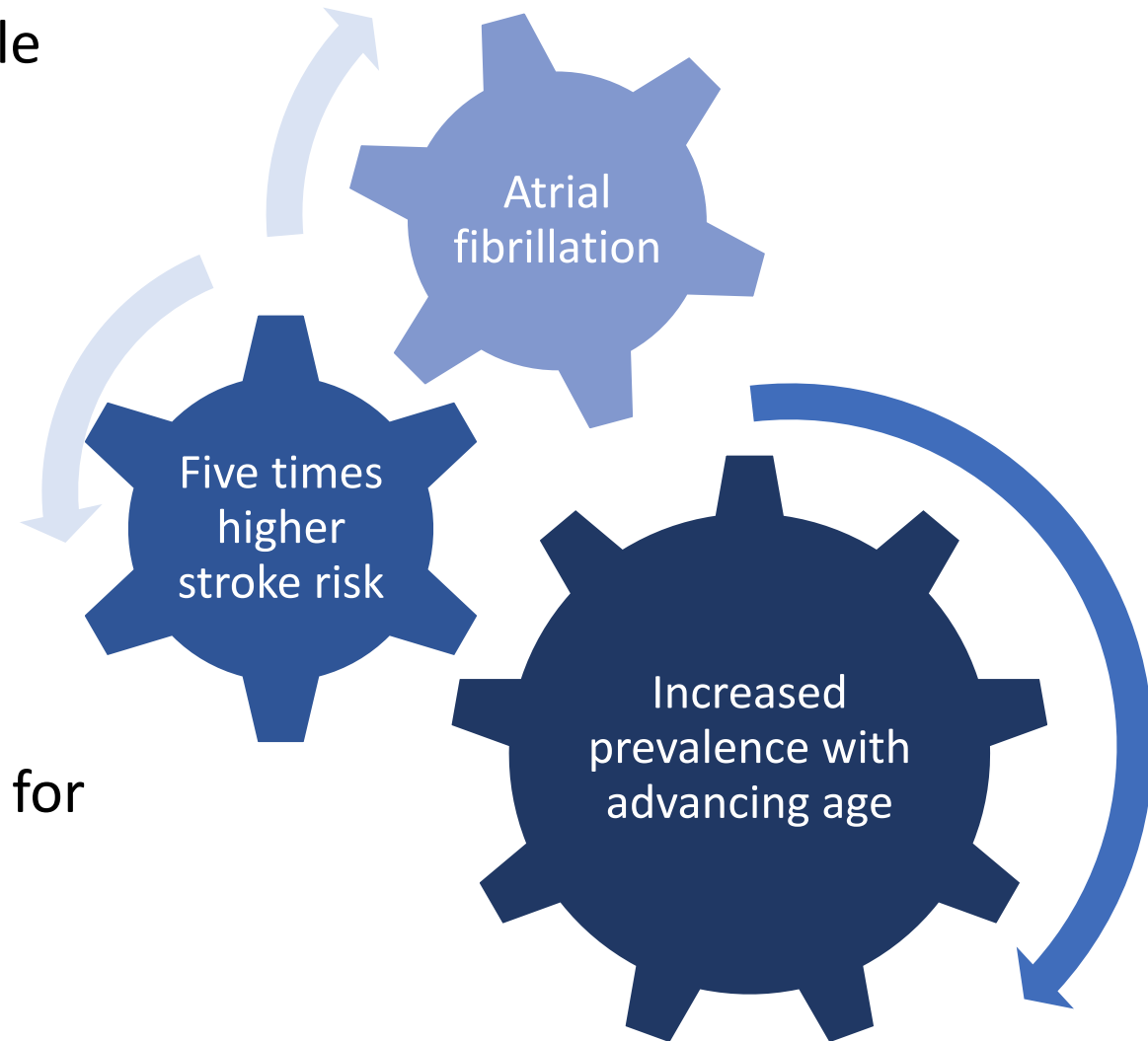


Secondary stroke medicines in care home residents



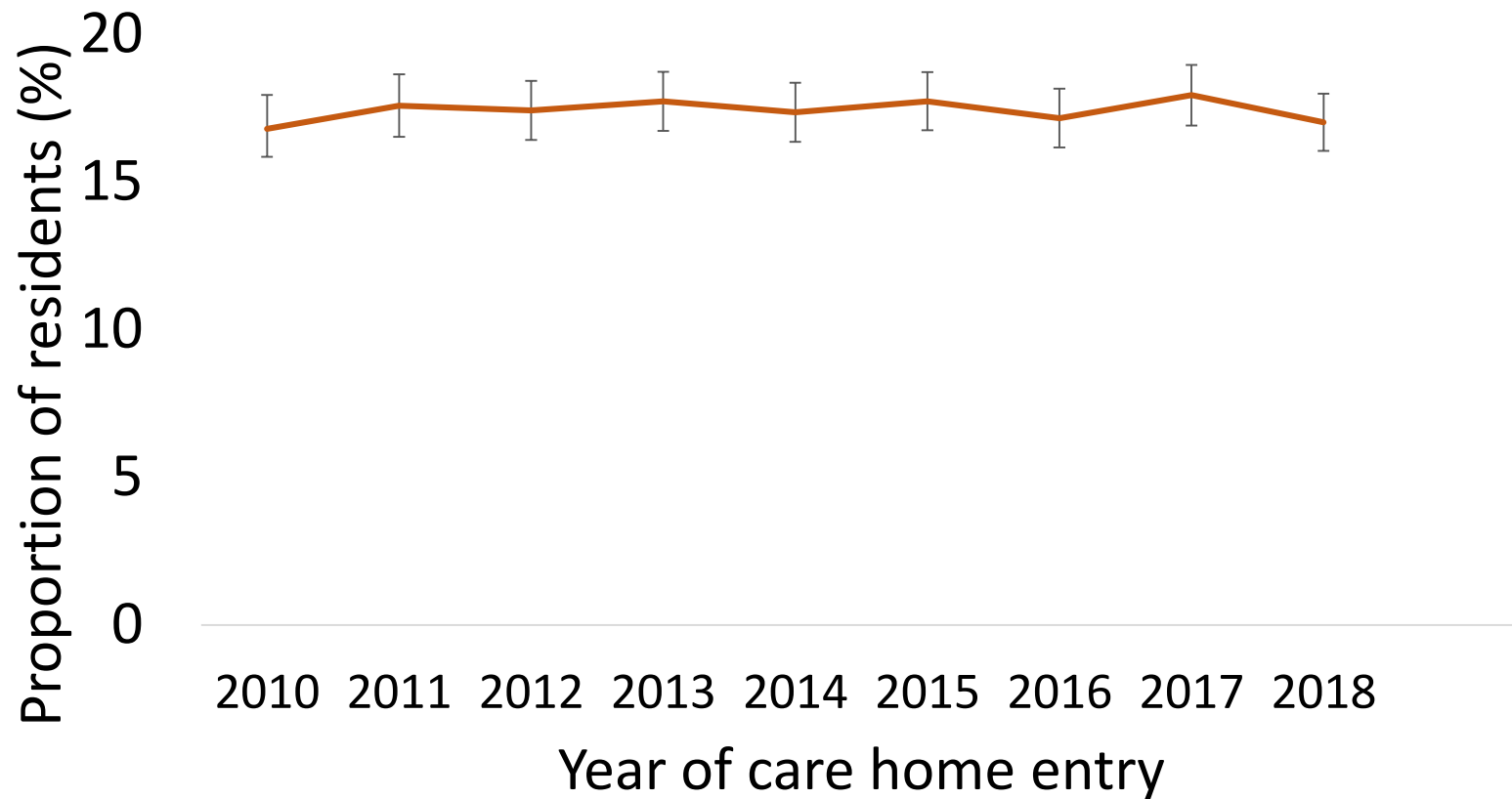
Atrial fibrillation (AF) in older adults living in care homes

- Care home residents are a growing group of people with AF
- Previous estimates of AF prevalence have ranged from 7-38% (*Ritchie et al, 2021*)
- Risk of adverse health outcomes of care home residents with AF is unclear (*Ritchie et al, 2021*)
- Evidence of under-prescription of anticoagulation for stroke prevention (*Rojas-Fernandez et al, 2017*)

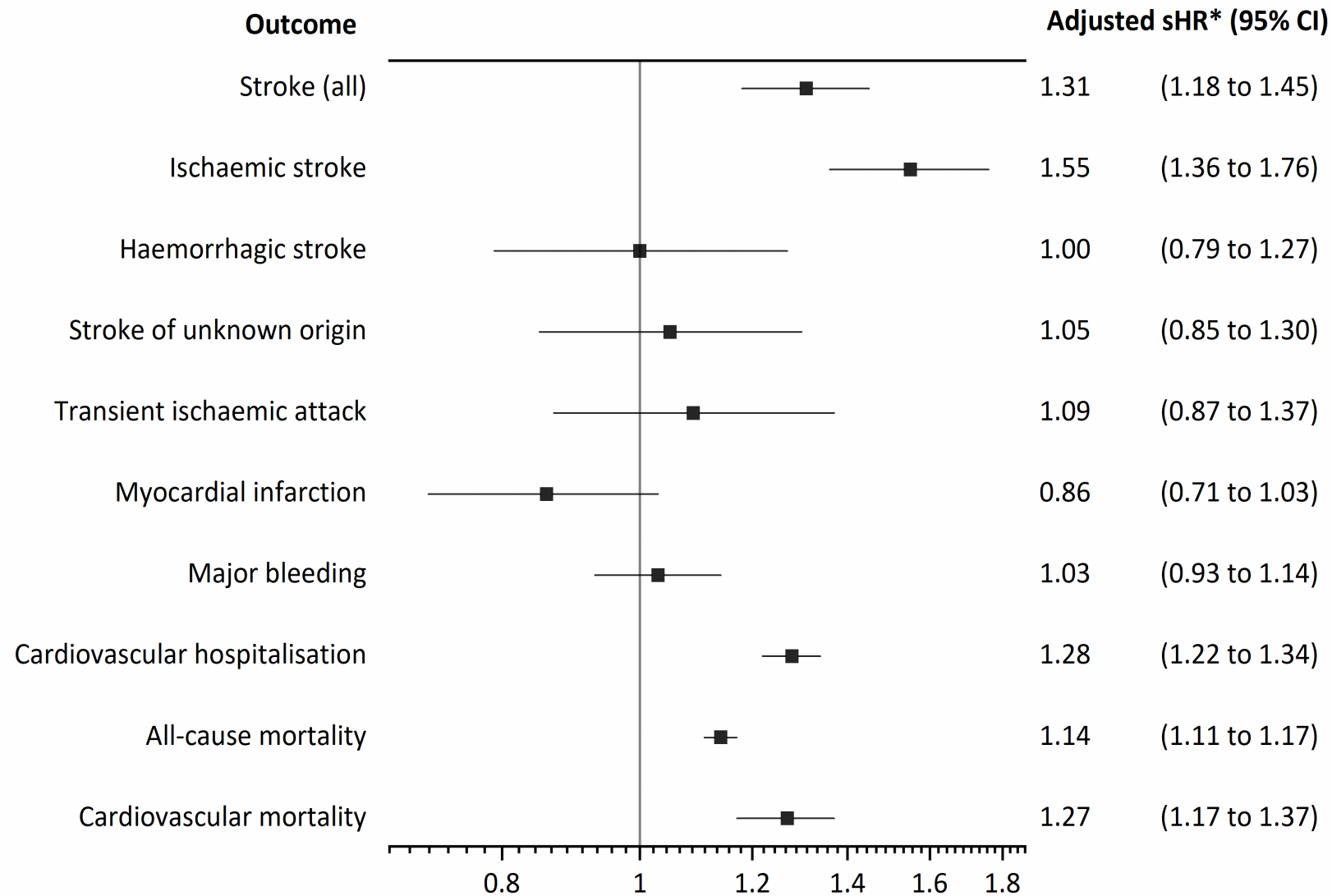


Prevalence of atrial fibrillation in older care home residents

- Overall prevalence of AF was 17.44% (95% CI 17.11 to 17.78) between 2010-2018
- Non-significant increase in age- and sex-standardised prevalence of AF from 16.79% (15.85 to 17.94) in 2010 to 17.02% (16.05 to 17.98) in 2018 (absolute change 2010-2018: 0.061, 95% CI -1.380 to 1.501, $p=0.93$)

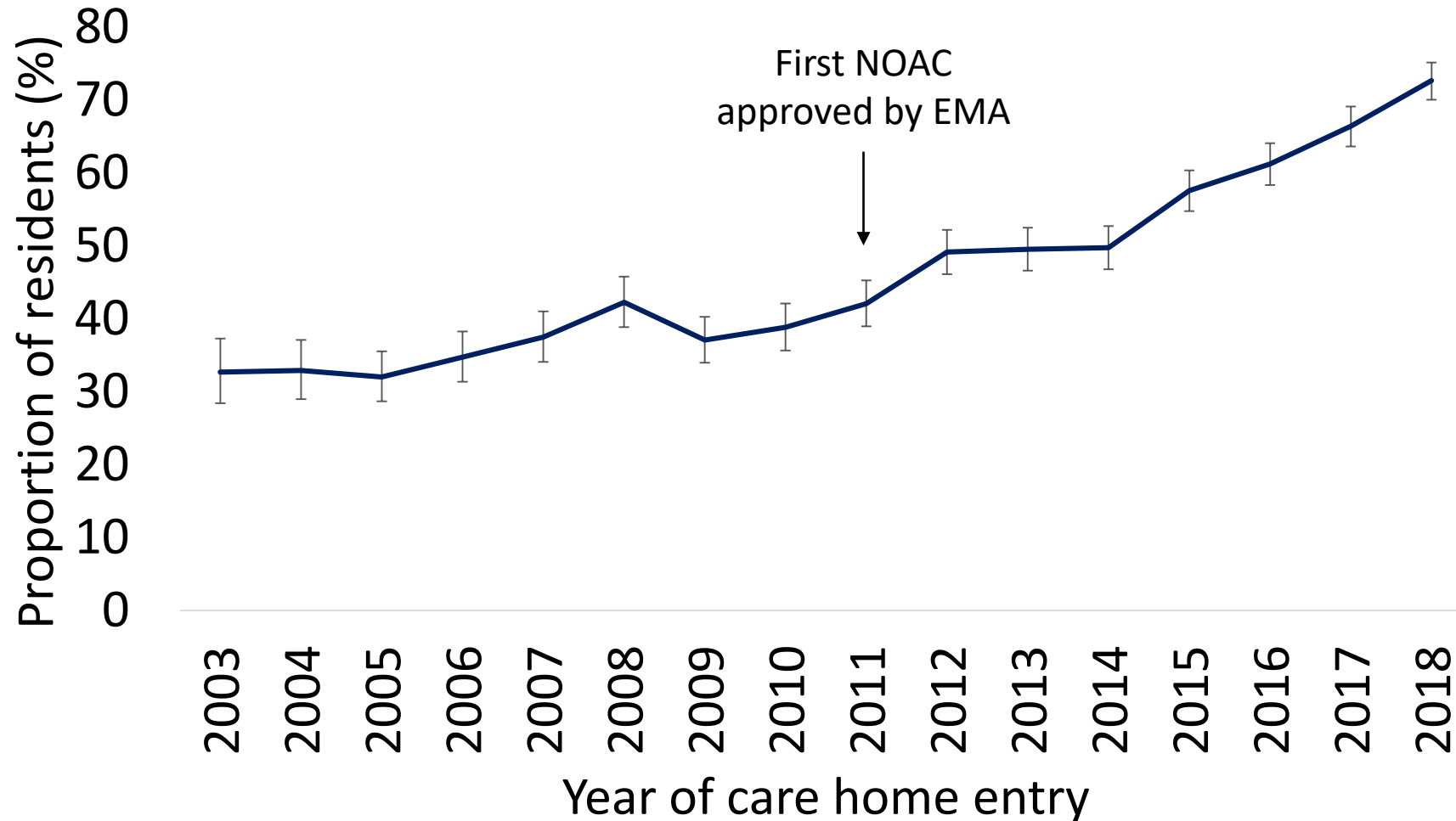


Risk of adverse health outcomes in older care home residents with atrial fibrillation

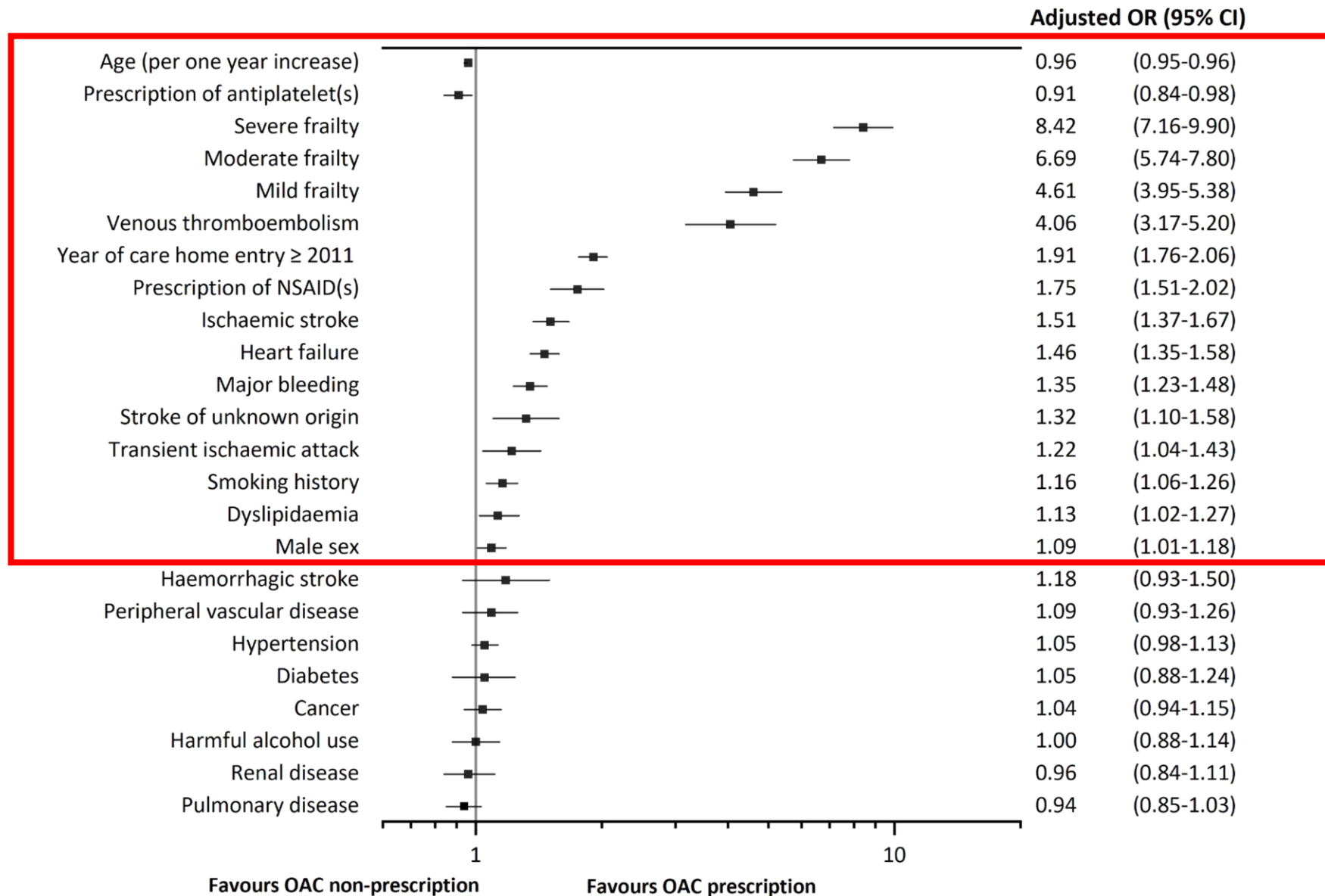


Trends in anticoagulant prescribing

- Prescription of anticoagulant therapy has increased over time from 32.7% in 2003 to 72.7% in 2018



Factors associated with prescribing anticoagulation



Key points

Prevalence of AF remained stable in older care home residents from 2010-2018

Residents with AF had a higher risk of adverse health events, even when mortality was adjusted for as a competing risk

Prescription of anticoagulant therapy has increased over time, but rates are still sub-optimal

Treatment of AF in accordance with guidelines is critical in this population to reduce adverse health outcomes

Thank you.