

# Prevalence and Outcomes of Recorded Dementia: a Population Cohort Study of 133,407 Older Adults using Linked Routine Data

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## INTRODUCTION

- Dementia diagnoses are recorded in different routine data sources that may not be linked
- People with dementia, diagnosed and undiagnosed, are frequently hospitalised, presenting potential opportunity to diagnose dementia or initiate a post-discharge diagnostic process
- UK national guidelines (NICE, SIGN) recommend diagnosis in hospital for appropriate cases
- However, little is known about how many people are diagnosed in acute hospitals and whether these individuals differ from those diagnosed in the community

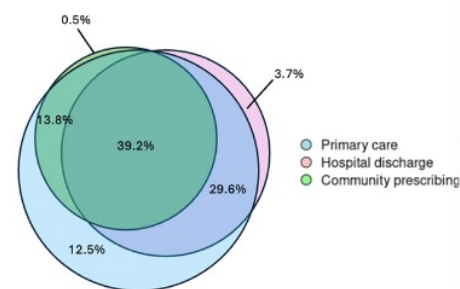
**STUDY AIM:** to determine the **prevalence of dementia** in a community population cohort at baseline and over a subsequent four-year period using **multiple routine data sources** and to examine associations between **recorded dementia and emergency hospitalisation or mortality**

## METHODS

- Retrospective cohort study using routinely collected pseudonymised data (DataLoch)
- Included: all adults ≥65 years on 1<sup>st</sup> April 2016 registered with a GP in NHS Lothian (SE Scotland)
- Dementia identified using linked primary care, hospital discharge, community prescribing records
- Cox proportional hazards and Fine-Gray competing risks models to determine associations between dementia, emergency hospitalisation and death

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## RESULTS



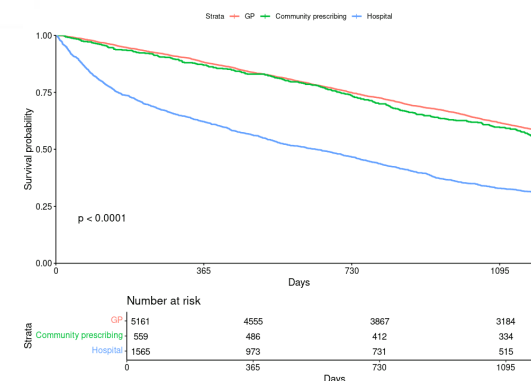
N=7544 (5.7%) had a dementia record in one or more data sources on 1<sup>st</sup> April 2016

People diagnosed in hospital were **older, frailer and more socioeconomically deprived** than those diagnosed in the community

They had a higher mortality rate after adjusting for confounders including age, sex, and frailty

From April 2016 to April 2020, a further 7359 (5.8%) people had a new dementia record → 22.2% of these were first recorded in hospital

Only 35.9% of hospital diagnoses were recorded in primary care within a year, and 12.2% received community dementia prescriptions



## CONCLUSIONS

- One in five people had their first dementia diagnosis recorded in an acute hospital
- Many of these diagnoses were not transferred to community records
- Need to accurately record dementia diagnoses and scrutinise hospital diagnostic pathways and information transfer to ensure everyone receives appropriate post-diagnostic support and care