Background

- Recovery from the COVID-19 pandemic is challenging for the National Health Service

- Accident and emergency care is in crisis, with long delays for patients and ambulances backed up waiting outside emergency departments

- The causes are contested and poorly understood

- We were asked by the County Council to investigate using data

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Aims

1. To determine national changes in health and social care activity before and after Covid-19

2. To determine local changes and time trends in health and social care activity before and after Covid-19

3. To identify patient characteristics associated with emergency care use

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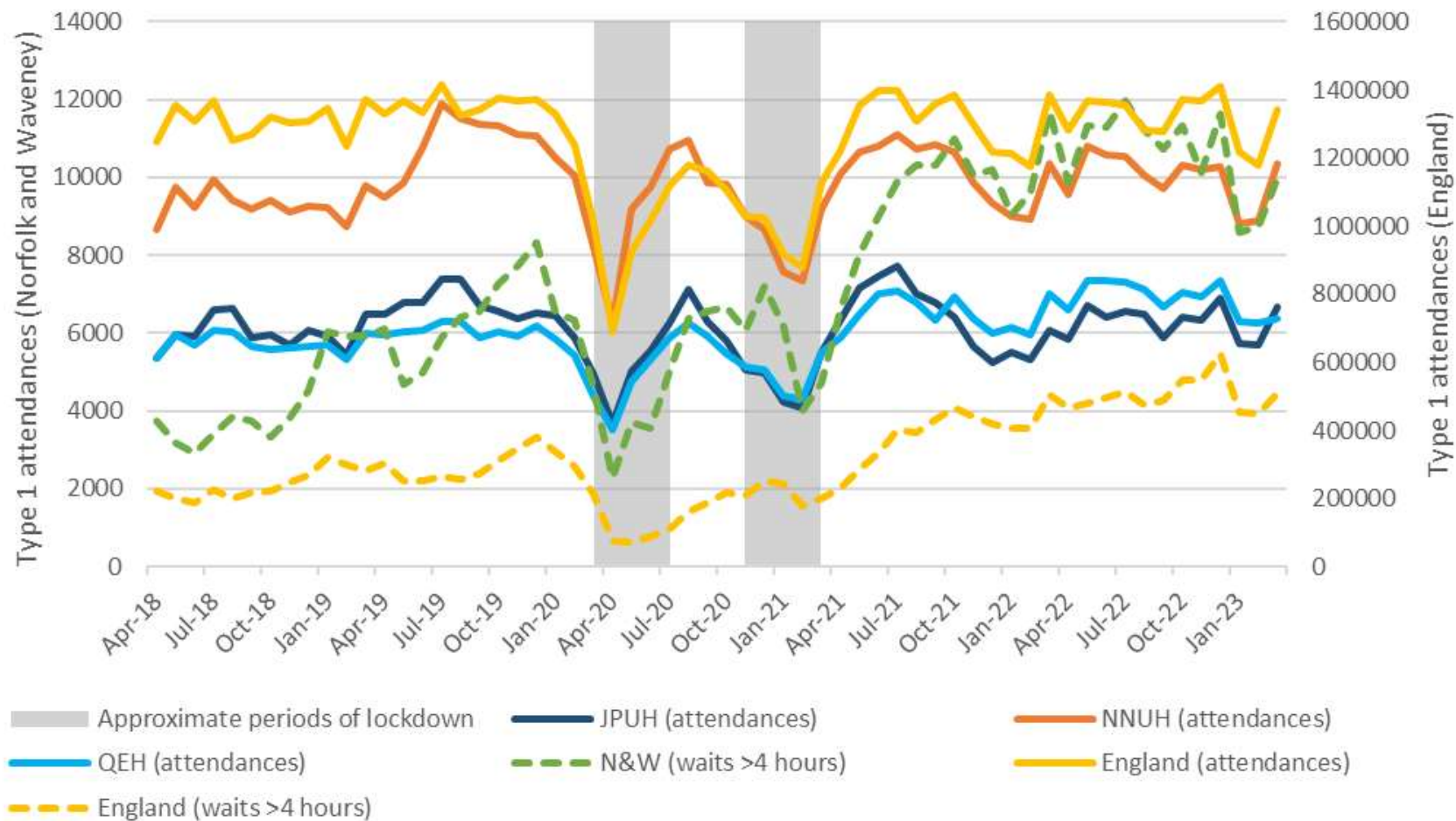
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Methods

1. Compare health and care activity from April 2018 - March 2020 with April 2021 - March 2023 nationally in England and locally in Norfolk

2. Use time series analysis to describe relevant changes in health care activity from April 2018 to March 2023

3. Use cross-sectional analysis to identify individual characteristics associated with ED use from April 2022 to March 2023

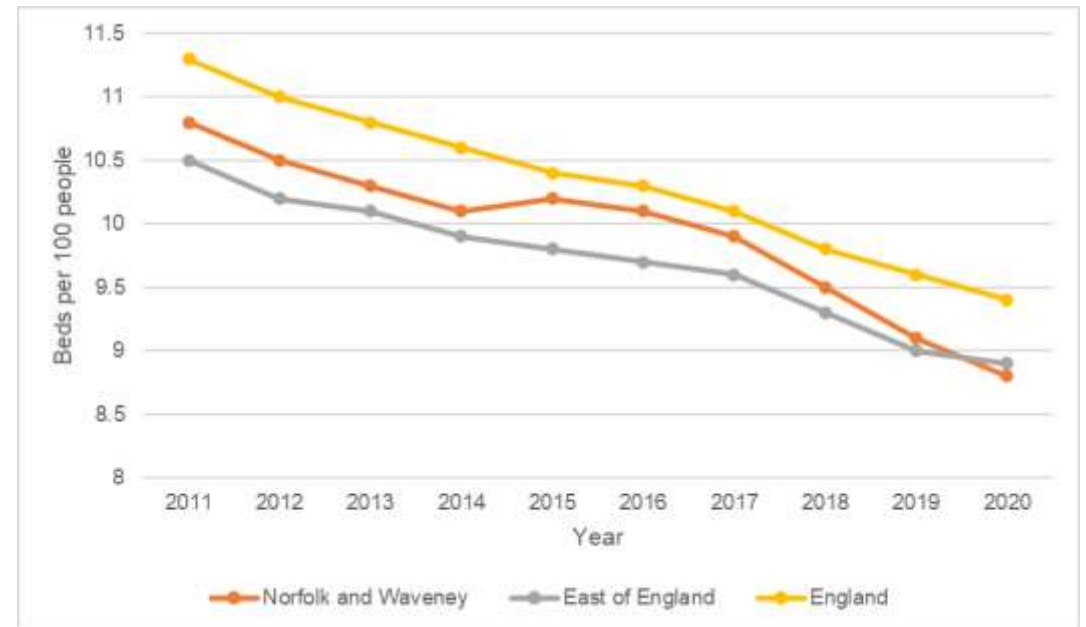THE ECOSYSTEM OF EVIDENCE | Lessons learned in the pandemic era and future challenges

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Results 1 – waits over 4 hou

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Ambulance response times, East of England, 2018-23

Category 2: A serious condition, such as stroke or chest pain, which may require rapid assessment and/or urgent transport
Category 3: An urgent problem, such as an uncomplicated diabetic issue, which requires treatment and transport to an acute setting

Care home beds per 100 people aged over 75, 2011-21

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Emergency department daily attendances (NNUH)
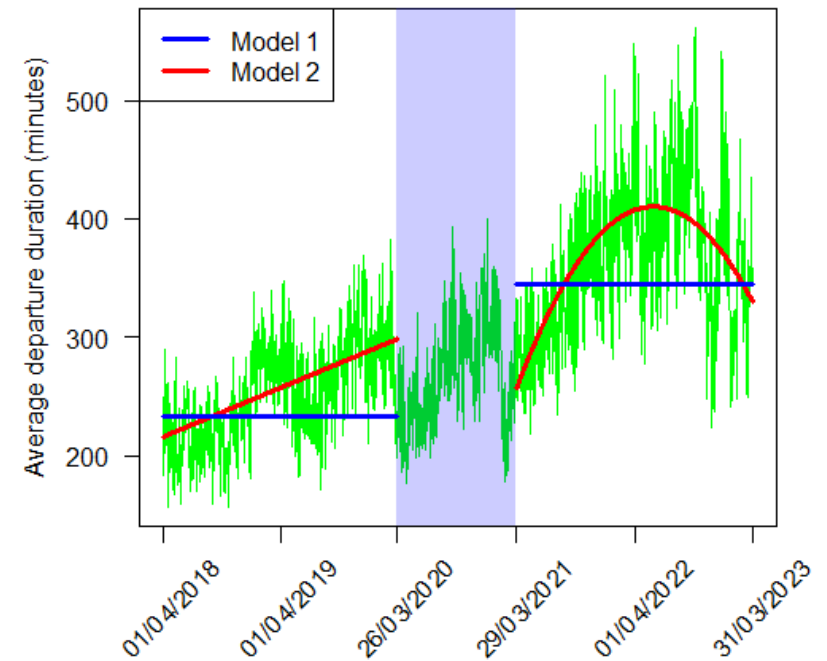Model 1 (comparing averages between periods)
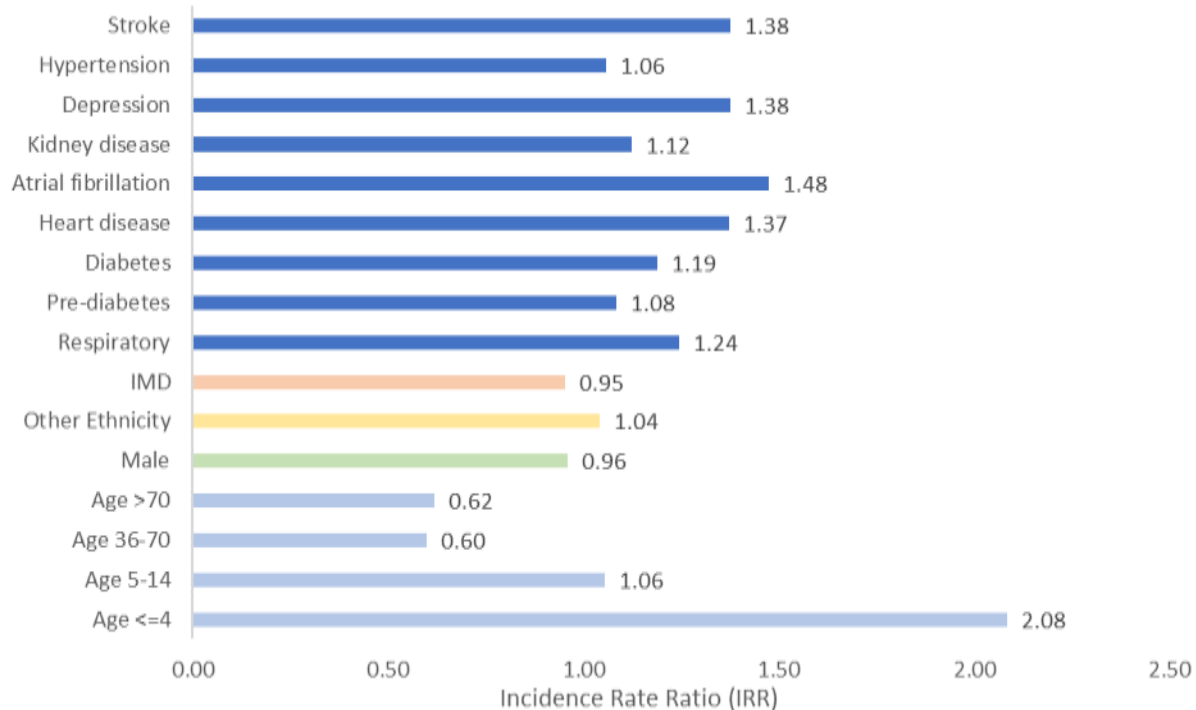Model 2 (considering the changes within each period)
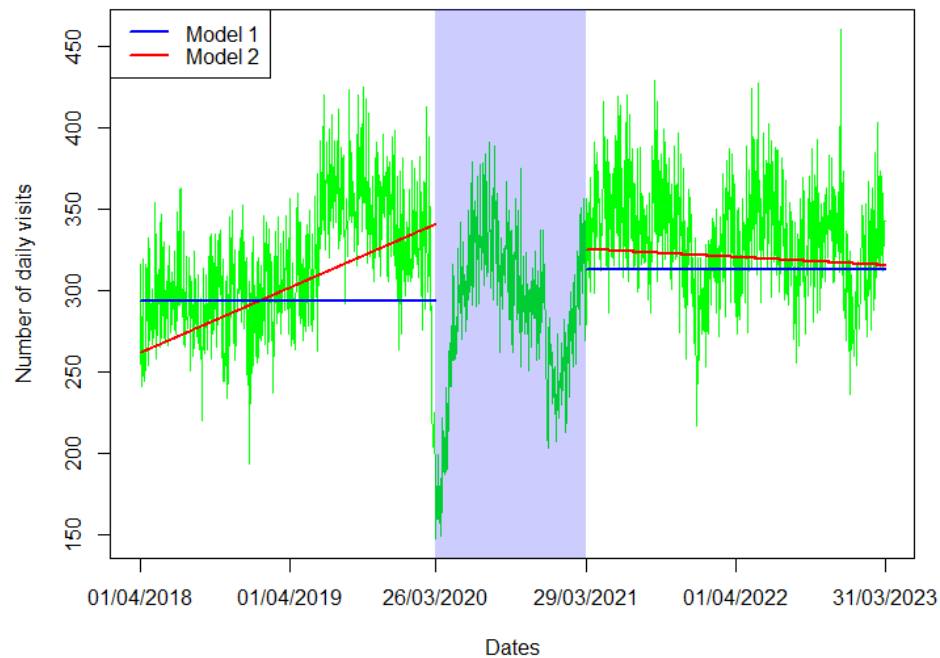
Emergency department waiting times (NNUH)
Model 1 (comparing averages between periods)
Model 2 (considering the changes within each period)

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Results 4 – patient characteristics

Association between patient characteristics and ED attendances
- Ethnicity compared to 'White'
- Sex compared to 'Female'
- Age compared to 15-35 years
- The IRR for index of multiple deprivation (IMD) is for a one decile difference, with increasing IMD decile representing less deprivation

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Limits

- Due to differences in data recording, results are not entirely comparable over the years, and it has been difficult to interpret patterns of use between Type 1 (hospital ED) and Type 3 (walk-in centres, minor injuries units, GP Front Door services) attendances

- Data for attendance has only been collected by those with an address or registered general practice located in Norfolk and Waveney, therefore excluding attendances from residents out of area

Conclusions

- Waiting times for ambulances and care in emergency departments have dramatically increased since 2018, with only a small increase in patients

- Emergency departments and hospitals are full with many patients fit for discharge

- Social care capacity has steadily declined over 10 years and continues to decline due to funding cuts and difficulty with staff recruitment

- Future plans should involve the whole health and social care system, including improving capacity in primary care and social care over the short and longer term

- Increased capacity in social care is urgently needed

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