Wakefield District Health & Care Partnership

Neighbourhood Health in Wakefield District – Risk Stratification

Ambulance Role in Reducing Heath Inequalities webinar

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Proud to be part of West Yorkshire Health and Care Partnership

Neighbourhood Health Teams Cohorts – phase 1 asks

- In order to develop neighbourhood health teams there is a set of asks for year one
- Overall aim is to work in an integrated way to improve coordination, personalisation and continuity of care for people with complex health and social care needs who require support from multiple services and organisations
- Initially places are asked to identify and prioritise specific groups (2% to 4% of population) where there is the greatest potential to improve levels of independence and reduce reliance on hospital care
- Examples of the relevant cohorts are
  - Adults with moderate or severe frailty
  - Palliative care or end of life
  - Physical disabilities or multiple long-term conditions

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Population Data, Risk Stratification and Neighbourhood Health Teams Cohorts – phase 1

- Risk stratification methodology developed using linked data model and machine learning algorithms
- High, medium (or rising) and low risk groups defined and identified
- Risk = risk of admission to hospital in next three months
- All data split to practice and neighbourhood level and can be reidentified and shared with PCNs
- Each emerging neighbourhood has selected a cohort to work with from Nov ‘25
- 10% reduction in admissions for high and medium risk would avoid 226 admissions and 2,736 bed days

RISK GROUP	COPD	DEMENTIA	END-OF-LIFE
High risk	**322** (3.2% of register)	**131** (4.2% of register)	**177** (13.2% of register)
Medium risk	**672** (6.8% of register)	**456** (14.7% of register)	**153** (11.4% of register)
Low risk	**8,949** (90.0% of register)	**2,516** (81.1% of register)	**1,011** (75.4% of register)

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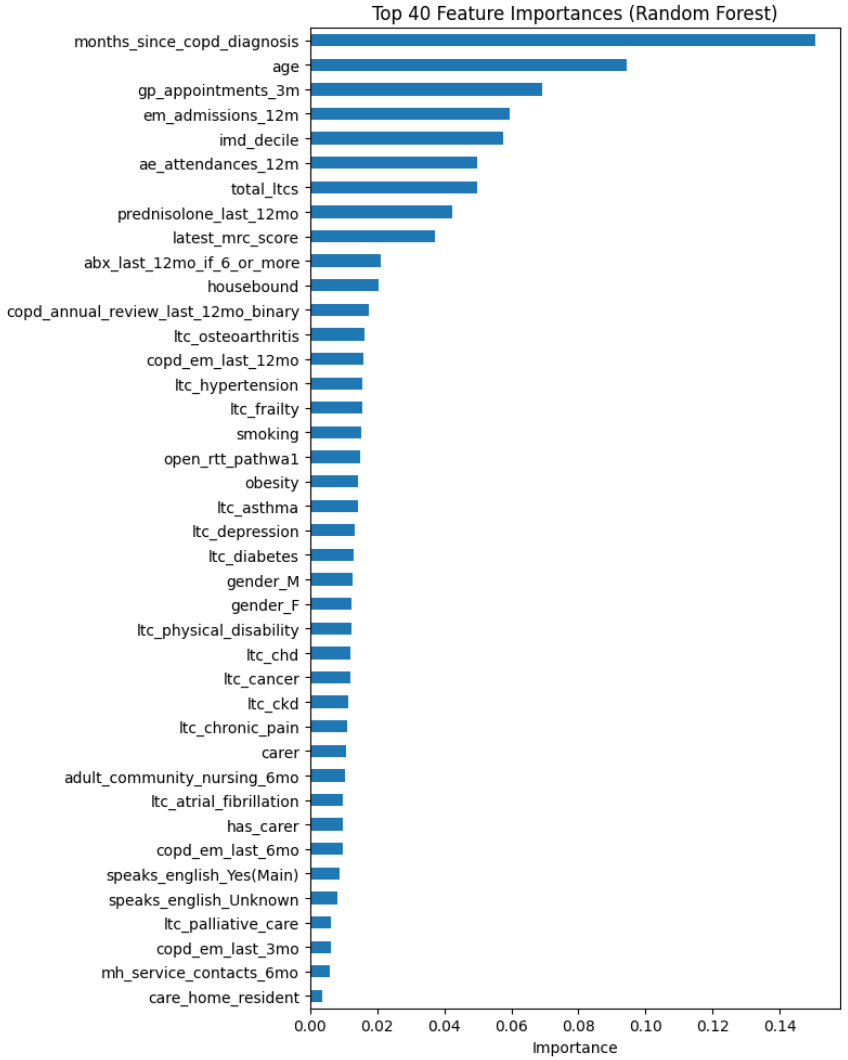
Development of the COPD risk stratification model

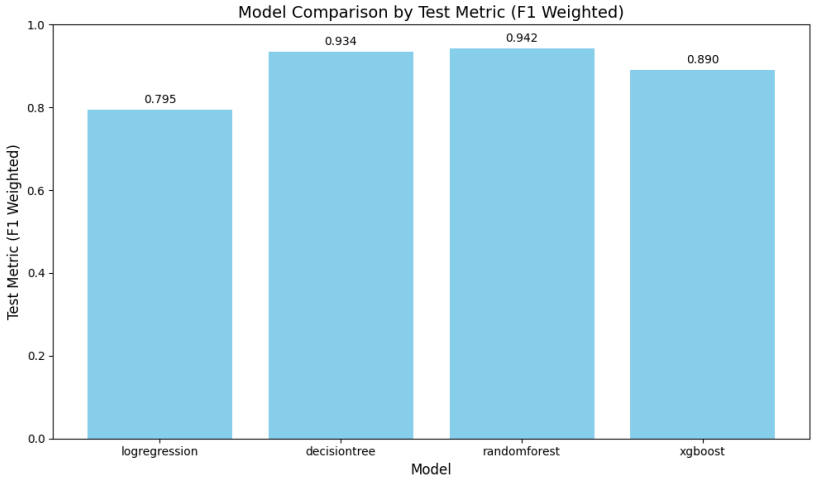


Model development

The COPD risk stratification model has undergone extensive testing, feature selection and fine-tuning to improve prediction performance of emergency admissions.

Deployment

The model can be applied to new data to return risk scores and risk categories to predict COPD patient emergency admissions. Subsequently, re-identified patient lists can be acquired via NECS.



Best model - Random Forest (RF):

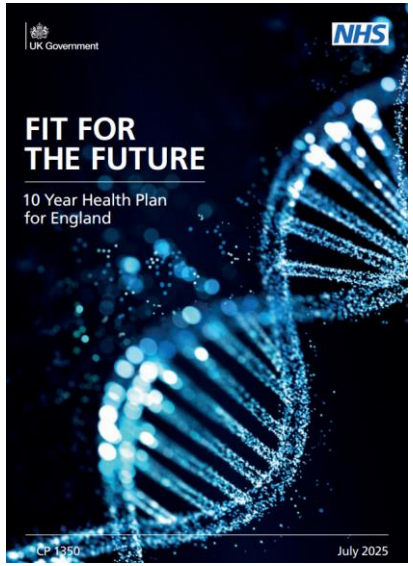
Weighted F1-score: 0.94 (94.0%)
AUC ROC score: 0.97

Wakefield Data & Analytics Service

Place-based Neighbourhood Health Plans

Guidance from Department of Health and Social Care co-produced with LGA
(due to be issued November 2025)

Neighbourhood Health encompasses NHS, Local Government and wider partnership roles (including VCSE) and responsibilities in improving the health and wellbeing for their local communities



Places need to develop neighbourhood health plans covering 5 years from 2026-27. They will cover how the ambitions in Fit for the Future – 10 Year Health Plan for England (July 2025)

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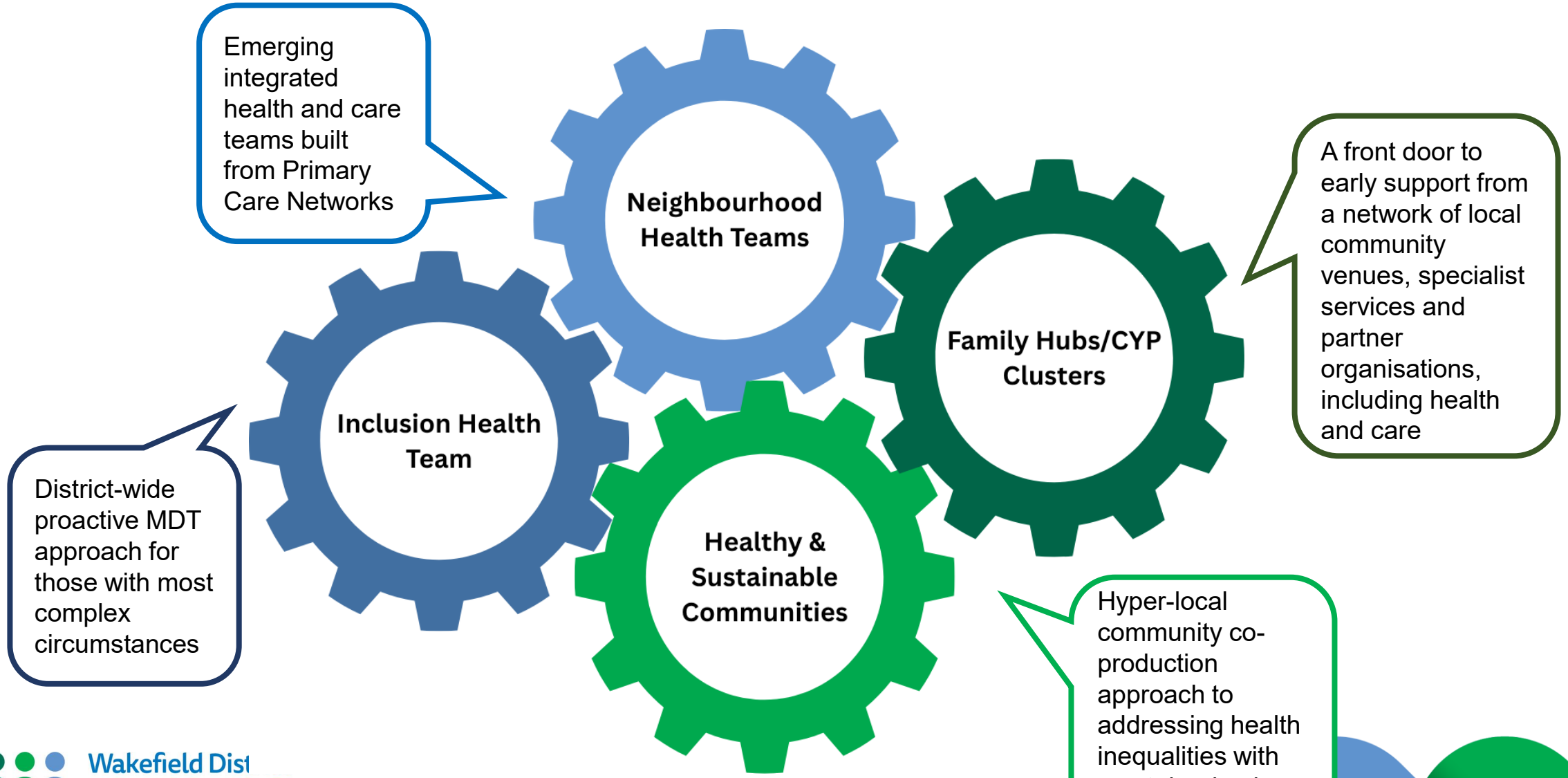
Neighbourhood health plans will be overseen by Health and Wellbeing Boards

- Broad scope includes **ICBs**, **local authorities**, **VCSEs**, **healthcare providers**, and **citizen voices**.
- A strategic plans and an operational plan will need to be developed
- Interim plans will be signed off by April / Q2 2026
- Full plans in place by April 2027

Will need to include:

- Agreement of neighbourhood footprints based on natural communities
- Priority outcomes for place and neighbourhoods (including NHS mandated, BCF and locally agreed measures) – based on JSNA insight
- Transparency on scope of services, and scale
- Agreement on the development of integrated neighbourhood teams
- Clarity on leadership and accountability arrangements for delivery
- Timetable for implementation of integrated neighbourhood teams

Neighbourhood Health in Wakefield District



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