

CVD: Public Health outcomes and prevention priorities for the system

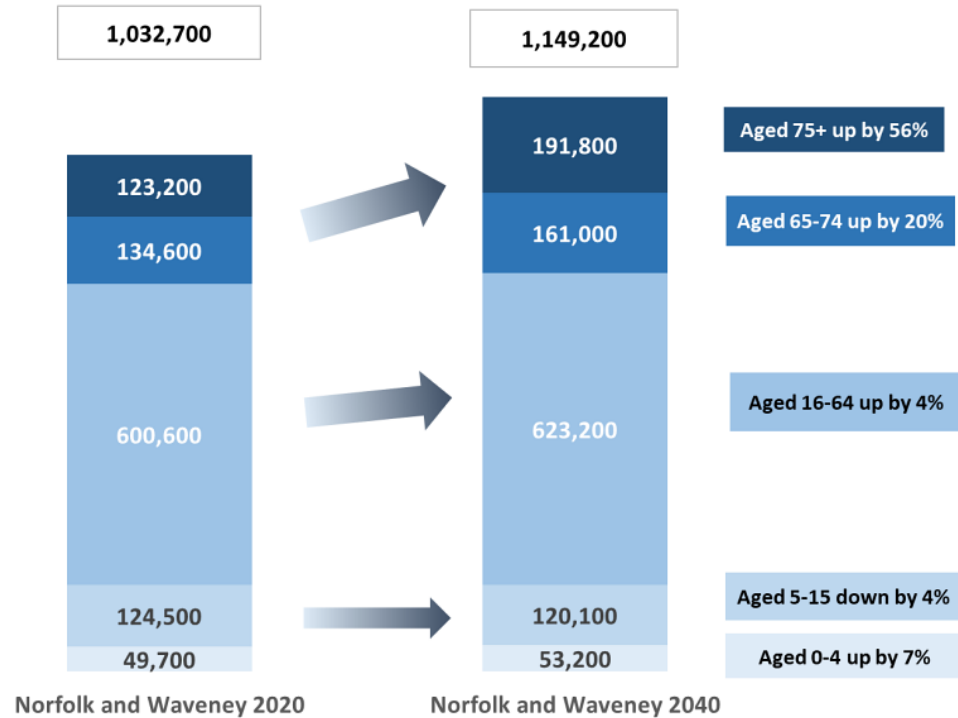
Integrated Care Partnership 21 June 2023

**Dr Abhijit Bagade, Consultant in Public Health Medicine,
Norfolk County Council**

Acknowledgements:

Dr Tim Winters / Josh Robotham – Intelligence, Insight and Analytics

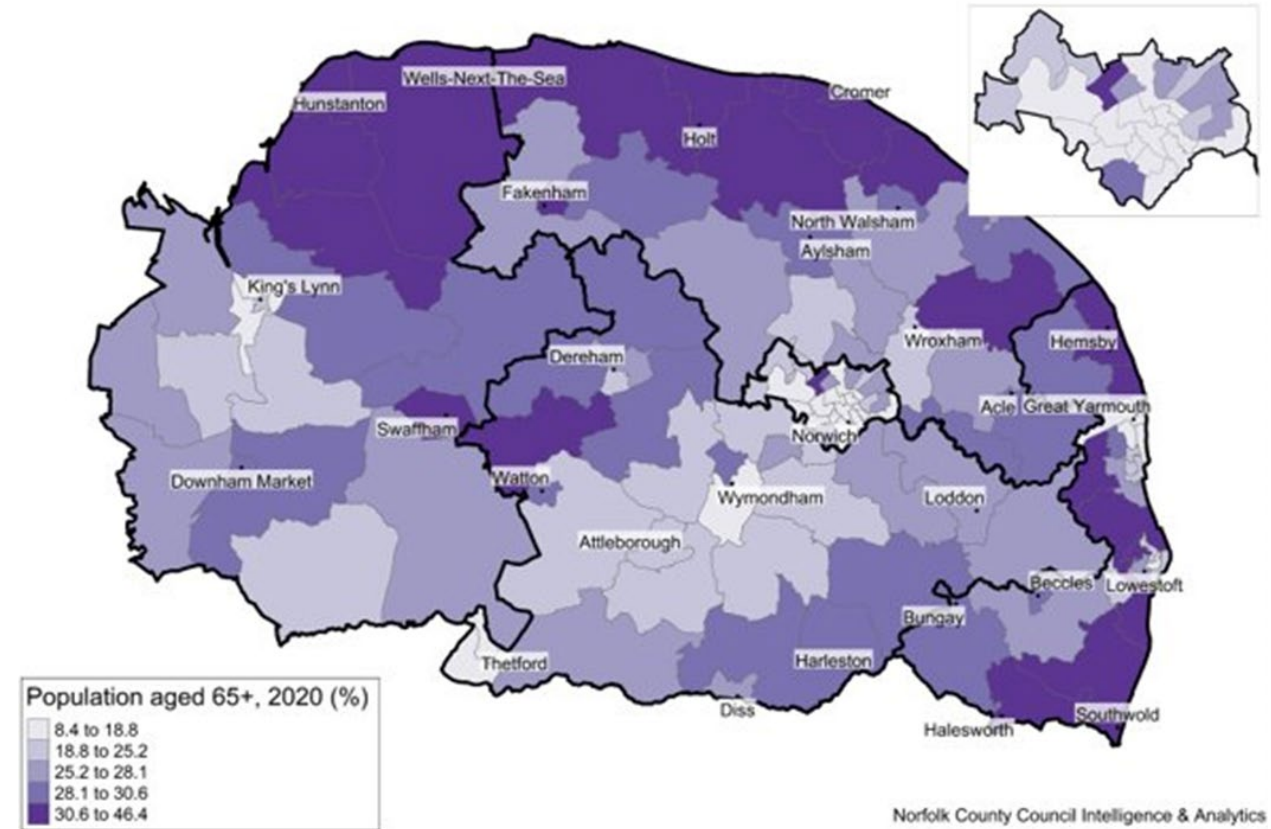
The total population of Norfolk and Waveney is increasing and most of the increase is projected to be in those 65 years or older.



From 2020 to 2040 there will be an estimated:

- 36% increase in people aged over 65, mostly in those aged 75+.
- 1% decrease in children and young people under the age of 16.

Increasing age leads to increased risk of long-term conditions including those linked to cardiovascular disease.

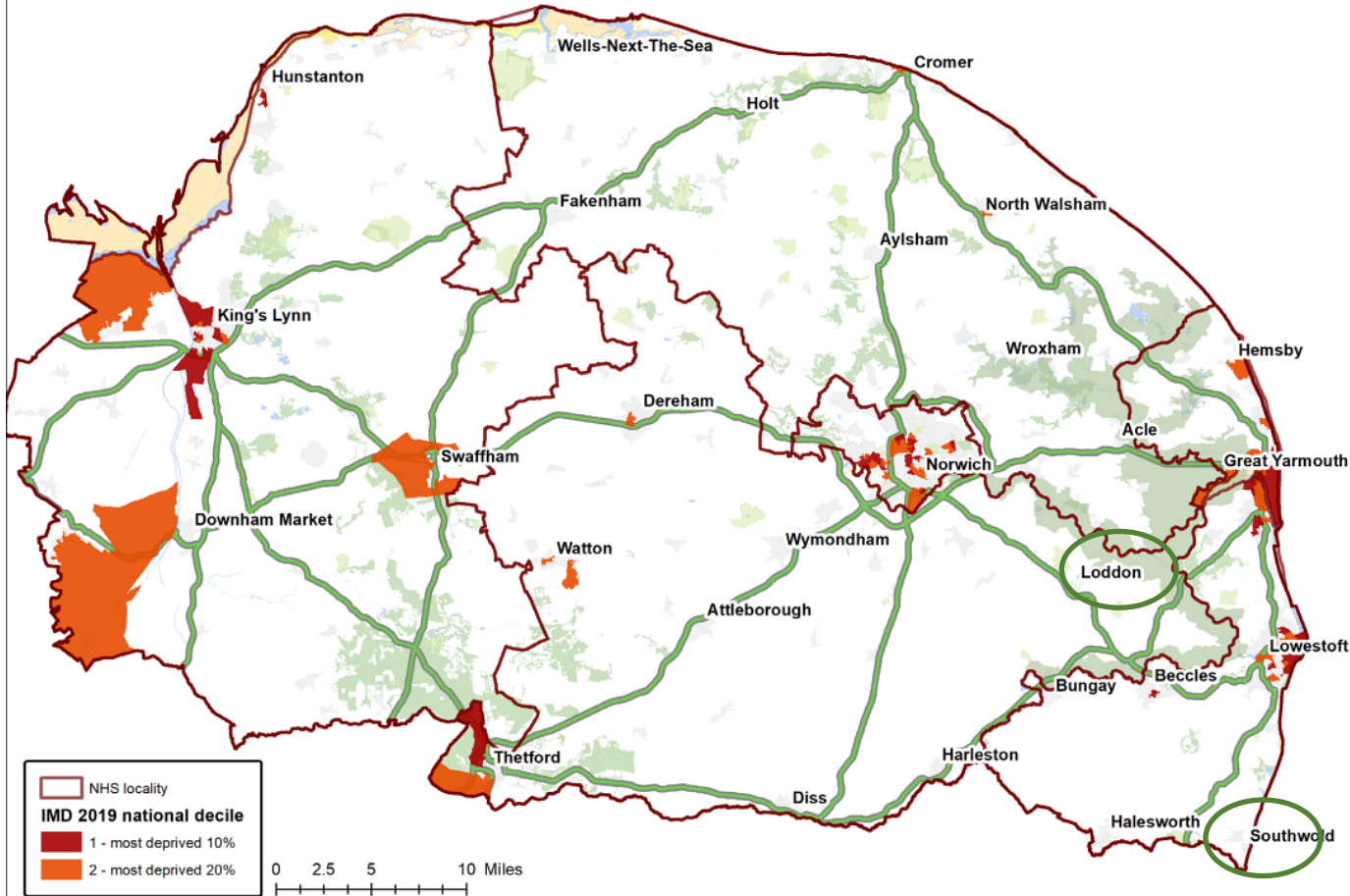


The communities with a greater proportion of people in later life are generally around the coast with some communities in central Norfolk around Swaffham and Dereham.

Inequality across Norfolk and Waveney in life expectancy

A male can expect to live to 83.3 years in Loddon where as 75.1 years in Great Yarmouth.

A female can expect to live for 86.4 years in Southwold where as 81 years in King's Lynn.



Locality	Male Life Expectancy 2015 to 2019 (years)	Female Life Expectancy 2015 to 2019 (years)
Great Yarmouth	75.1	81.2
King's Lynn	76.7	81.0
Loddon	83.3	85.8
Southwold	82.0	86.4
Norfolk	80.0	83.8
Norfolk & Waveney	80.0	83.8

Market town life expectancy gap*

- 8.2 years for men
- 5.4 years for women

But between the most deprived and least deprived communities it is**

- 9.2 years for men
- 7.2 years for women

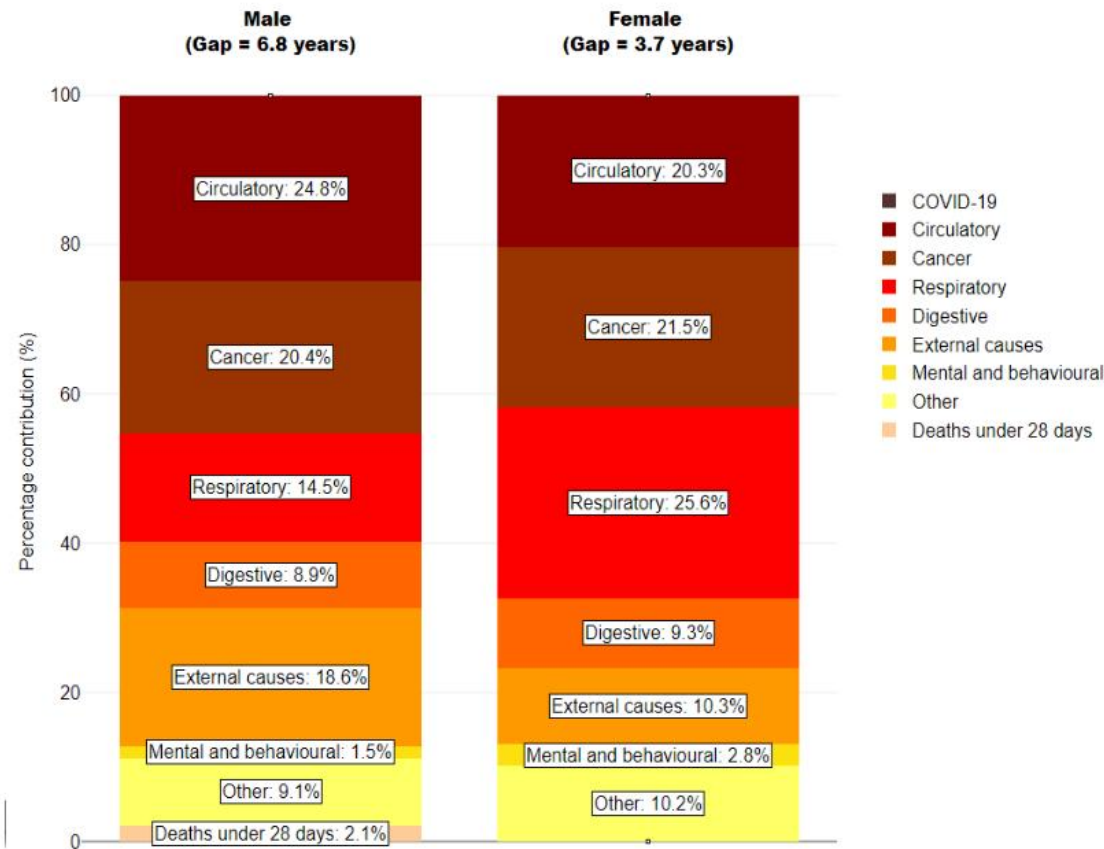
* local PHI calculations using NHS Digital civil registration data

** <https://fingertips.phe.org.uk/profile/local-health/>

What is driving the inequality gap?

Circulatory deaths made up about **20%-25%** of the Life expectancy gap between most deprived and least deprived prior to COVID19 2017-2019

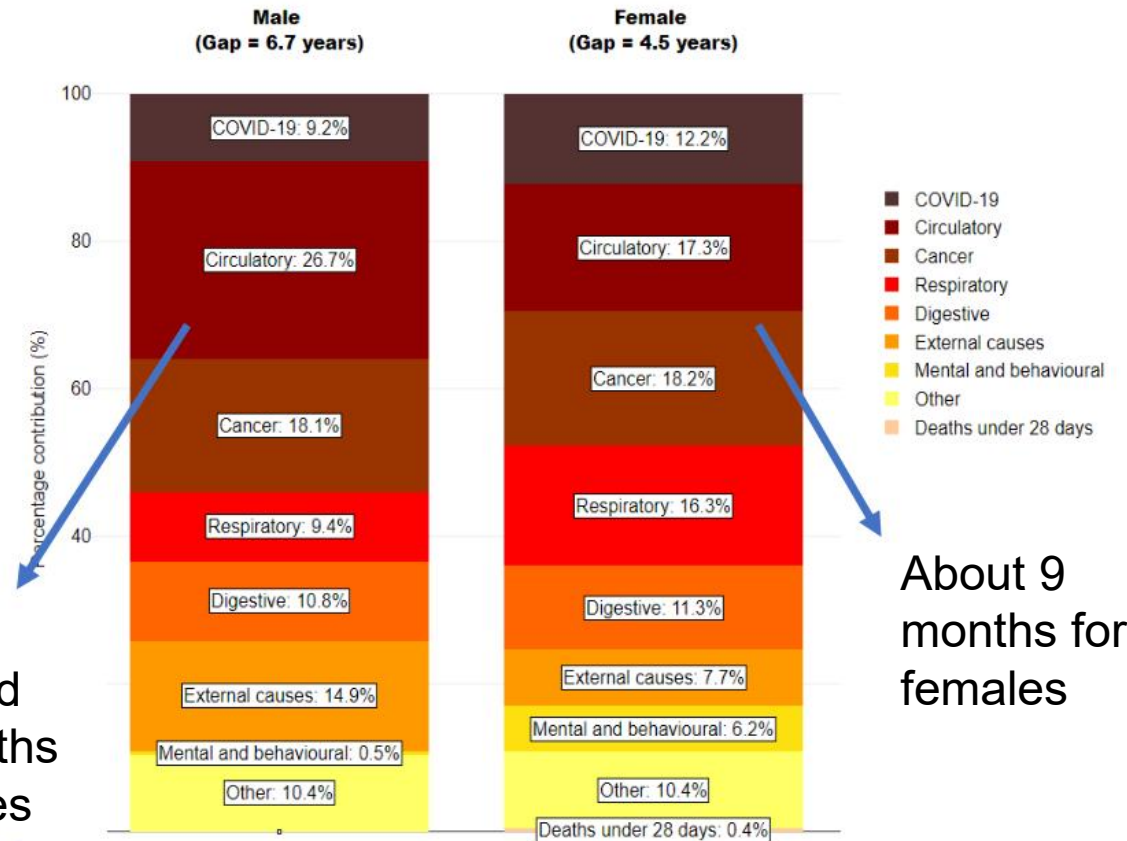
Breakdown of the life expectancy gap between the most and least deprived quintiles of Norfolk by cause of death, 2017 to 2019



Source: Office for Health Improvement and Disparities based on ONS death registration data and mid year population estimates for the relevant years, and Department for Levelling Up, Housing and Communities Index of Multiple Deprivation, 2019

Circulatory deaths made up about **17%-26%** of the Life expectancy gap between most deprived and least deprived during COVID19 2020-2021

Breakdown of the life expectancy gap between the most and least deprived quintiles of Norfolk by cause of death, 2020 to 2021 (Provisional)



About 1 year and 10 months for males

About 9 months for females

Source: Office for Health Improvement and Disparities based on ONS death registration data (provisional for 2021) and 2020 mid year population estimates, and Department for Levelling Up, Housing and Communities Index of Multiple Deprivation, 2019

Emergency admissions for Circulatory related conditions

About 12,500 each year, more than 10% of all emergency admissions

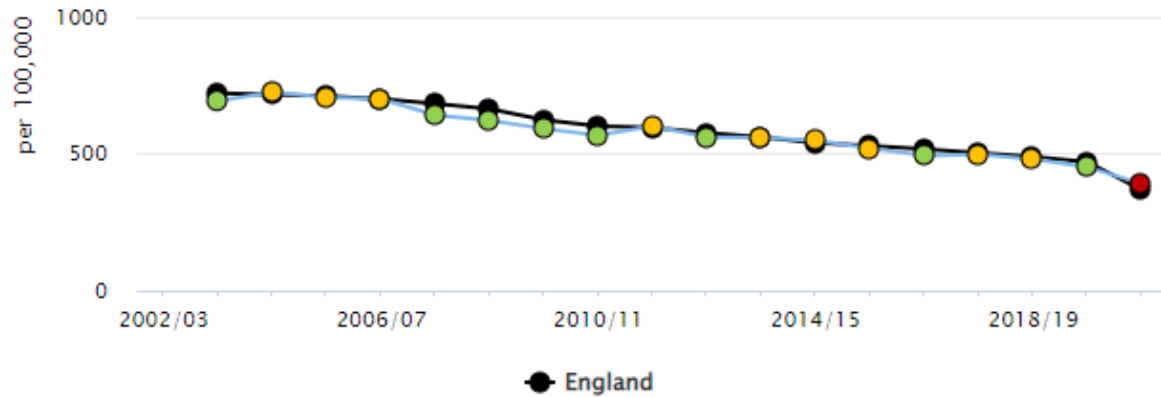
Neighbourhood	Aortic aneurysm & dissection	Atherosclerosis	Cardiac arrhythmias (AF)	Cerebrovascular diseases (stroke)	Diseases of arteries, arterioles & capillaries	Diseases of veins & lymphatic system nec.	Heart attack	Heart failure	Hypertensive diseases	Ischaemic heart diseases (IHD)	Pulmonary heart disease and diseases of pulmonary circulation	Other	Total
Great Yarmouth & Waveney	30	70	495	505	35	290	465	415	100	320	170	315	3,215
North Norfolk	20	55	345	460	25	80	320	350	40	150	90	220	2,160
Norwich	20	40	275	420	30	65	305	330	50	120	90	230	1,970
South Norfolk	25	45	360	475	30	85	355	370	45	16	100	245	2,305
West Norfolk	30	30	540	400	40	185	355	430	110	345	110	245	2,815
Norfolk & Waveney	120	245	2,020	2,270	170	705	1,795	1,895	345	1,090	565	1,250	12,470

Trends in emergency and elective hospital admissions: circulatory conditions

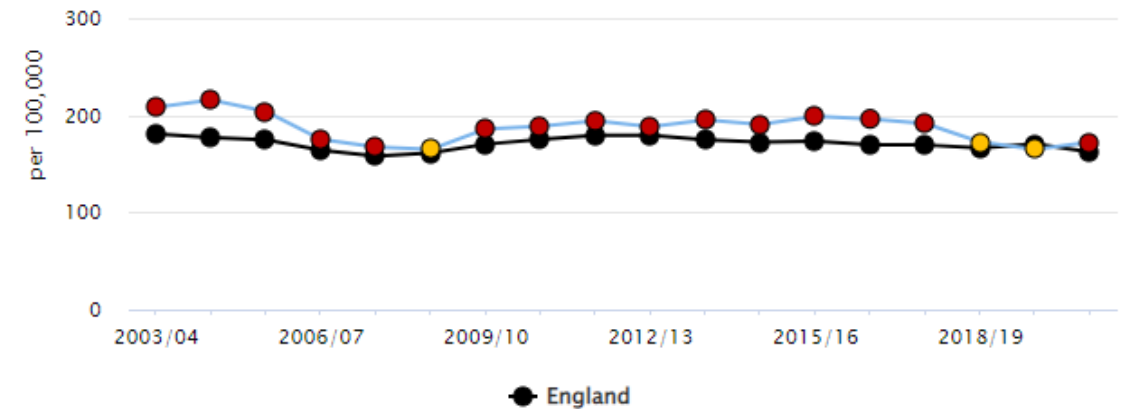
Admissions for heart attack and IHD are declining.

However, admissions for Stroke and heart failure have not reduced in the same way.

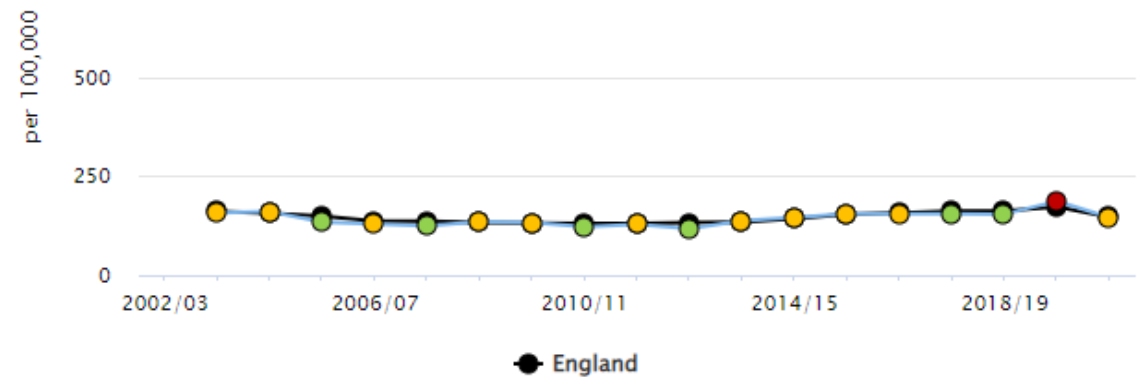
DSR heart attack and IHD admissions (all ages, emergency and elective) for NHS Norfolk and Waveney



DSR stroke admissions (all ages, emergency and elective) for NHS Norfolk and Waveney

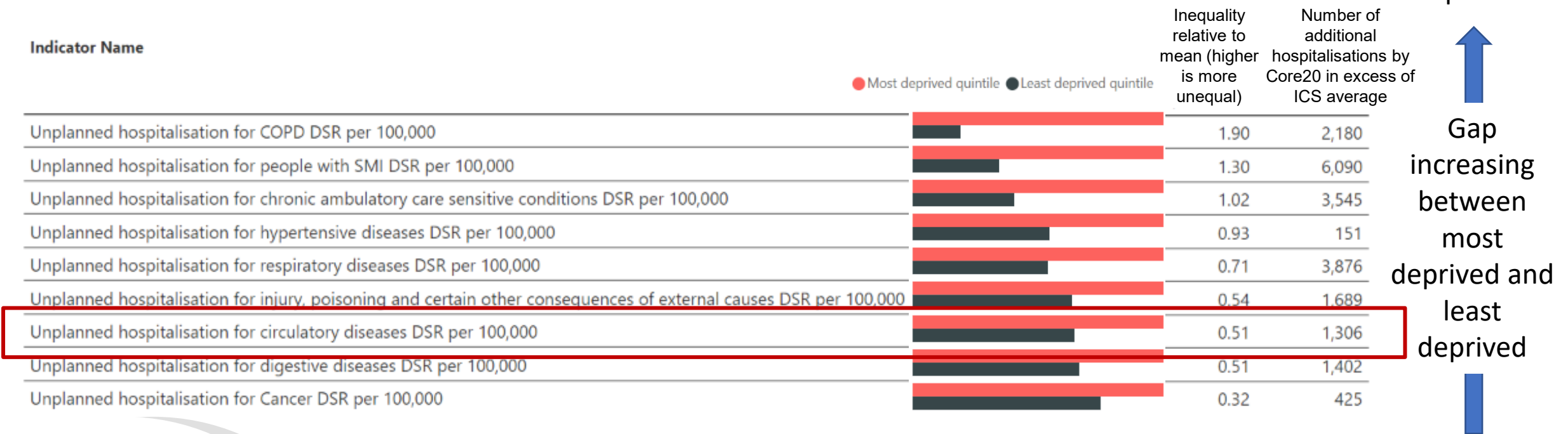


DSR heart failure admissions (all ages, emergency and elective) for NHS Norfolk and Waveney



Additional unplanned hospital admissions

- # the core 20 population experience 1,306 more admissions for circulatory conditions compared to the ICB average.
- # also place extra demand on the system.



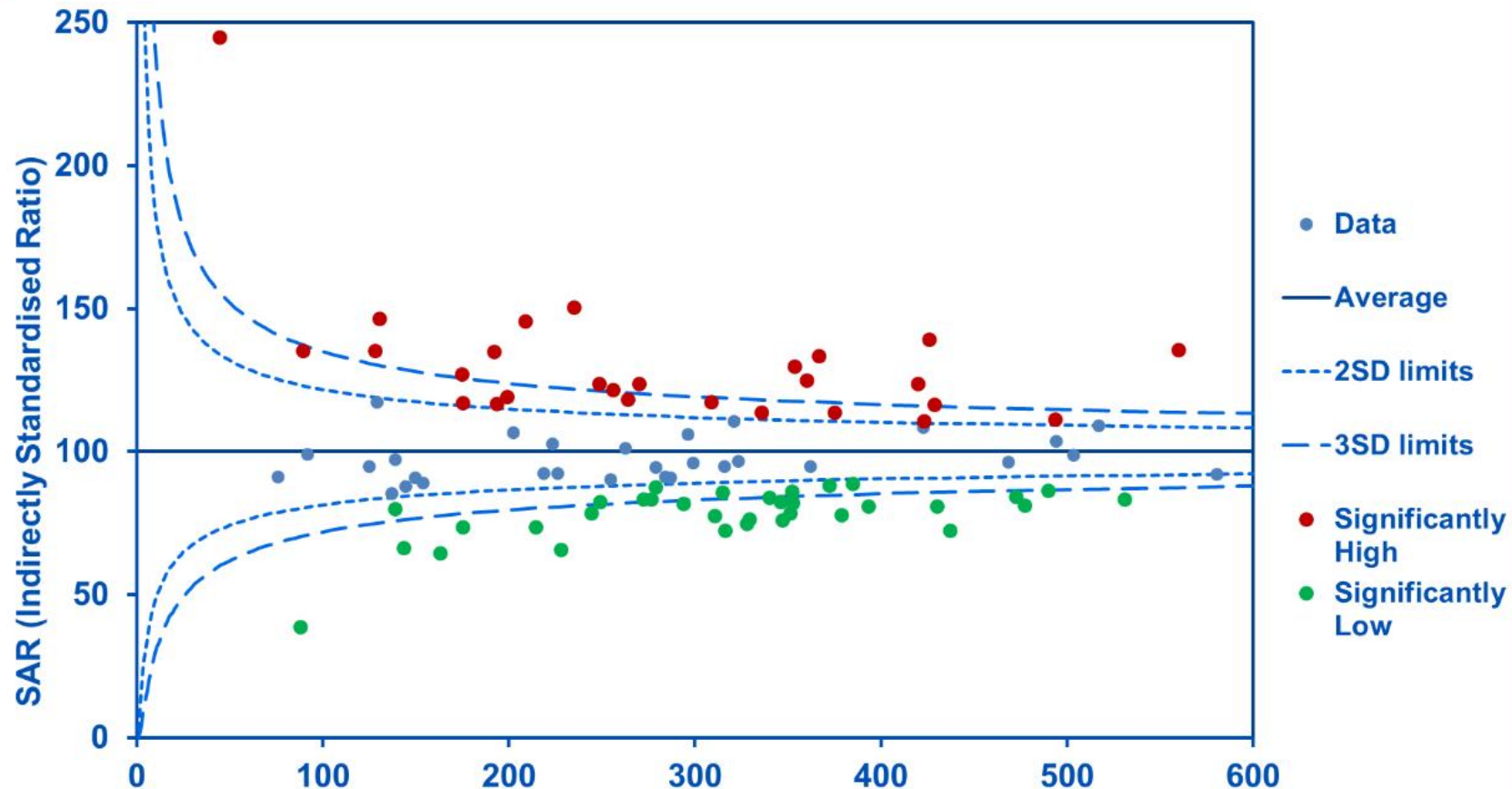
Addressing inequalities is an opportunity to improve outcomes for those from the most deprived areas AND reduce the demand on the urgent and emergency care pathway.

Least deprived is ~ 25% lower than most deprived

Practices with higher than expected admissions

Helps to highlight those with the largest potential opportunity to reduce emergency admissions

Emergency admissions for all circulatory conditions related ACS conditions for GP practices in Norfolk and Waveney between 2017/18 to 2019/20 (HES, NHS Digital)



Source: HES, NHS Digital Expected Emergency admissions

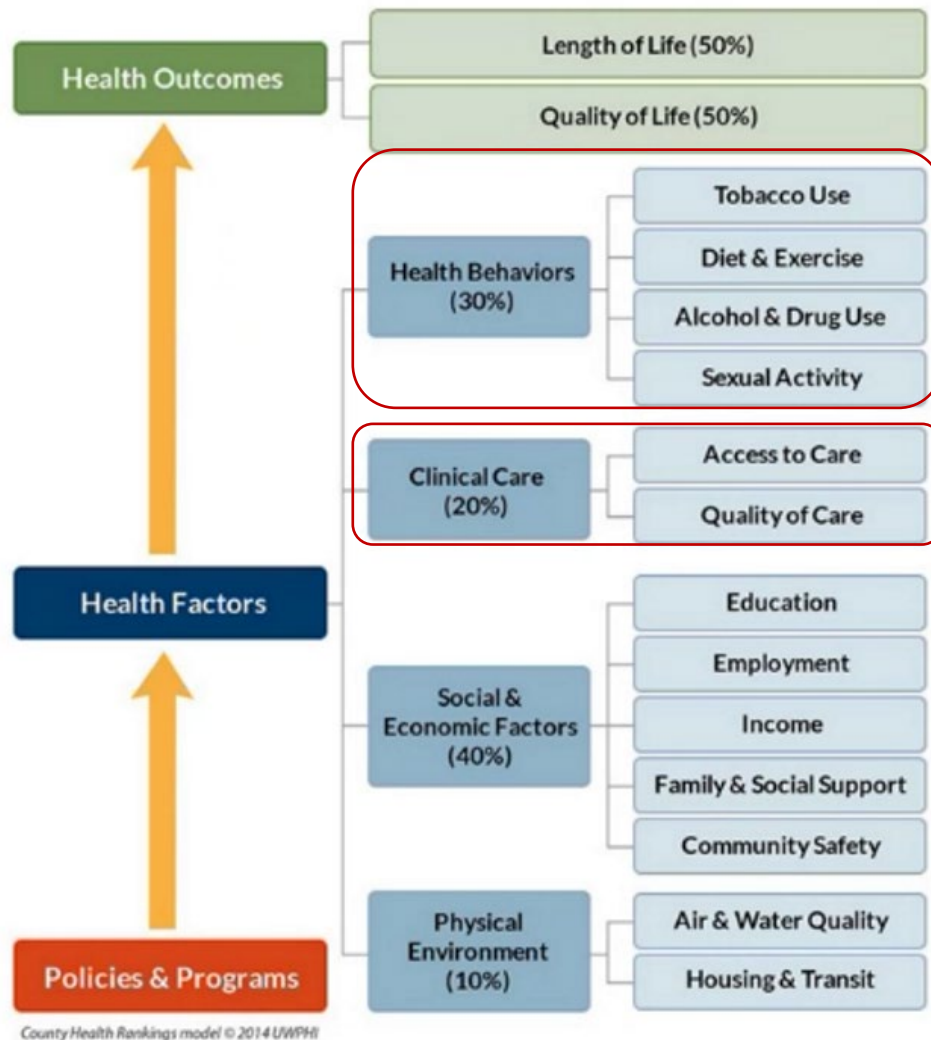
We can identify the Practices and PCNs to plan the interventions.

If the Practices in red had admissions as expected/average then we could potentially reduce the number of emergency admissions per year by almost 1,000.

Jigsaw of total health

...where we can make a difference for people and reduce inequalities in outcomes.

To start with, by changing health behaviours and by improving clinical care...

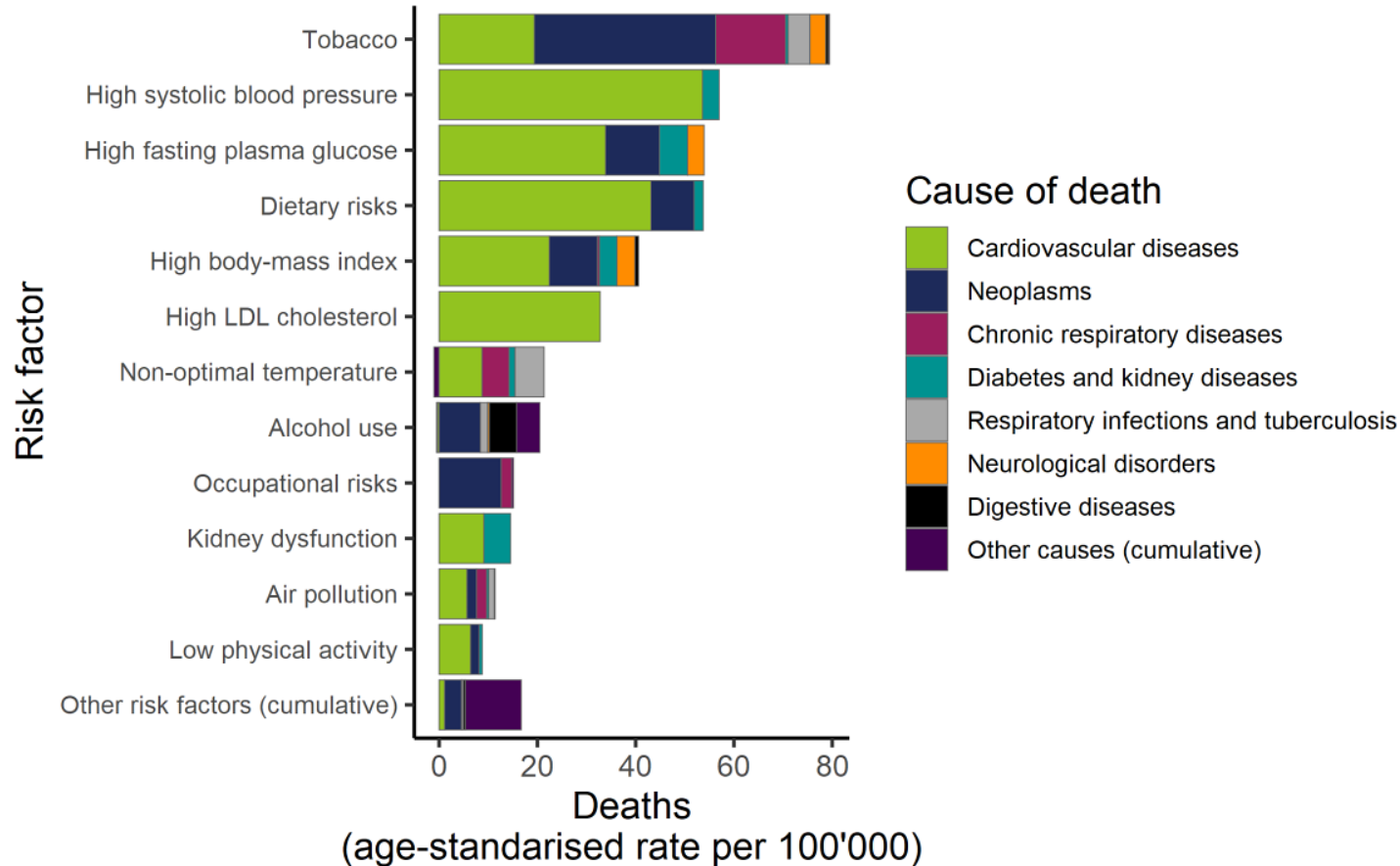


We can make a difference and help reduce the need for urgent and emergency care in the Core20 populations by:

- Working with people to change **health behaviours** (smoking, diet, exercise, alcohol, screening) – everybody's business, led by the HITG
- Ensuring better **access to care**
 - Accessible financially and physically in the core20 areas
 - Poverty proof services by considering transport costs and timing of appointments to negate the need for time off work etc.
- Focusing on even better **quality of care** (and improving patient engagement) both in primary care and in hospital

Risk factors for CVD

Some can be reduced by changing health behaviours and some can be reduced through clinical care and secondary prevention



Global Burden of Disease information highlights that high blood pressure, high blood sugar, high cholesterol, poor diet, obesity, tobacco and low physical activity all contribute to deaths due cardiovascular disease.

<https://www.healthdata.org/gbd/2019>

Clinical care and secondary prevention

- Hypertension management
- Blood glucose management
- Cholesterol management

Lifestyle can also help with the risk factors above and with

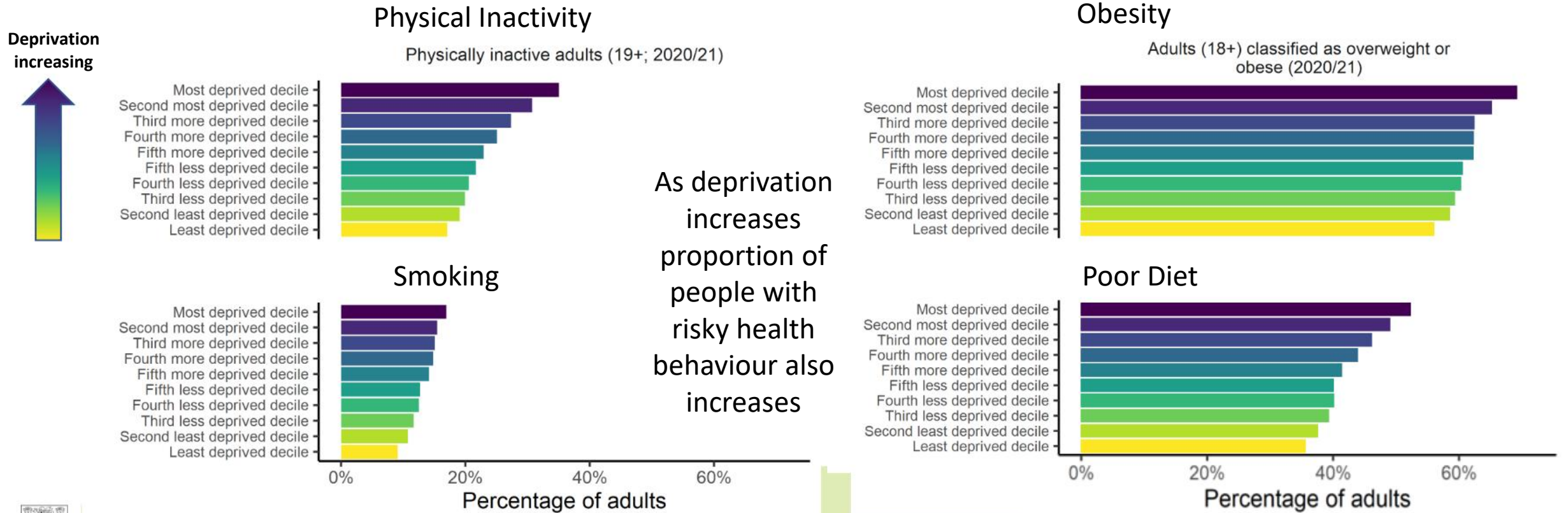
- Alcohol
- Excess weight
- Diet (processed food, lack of fibre etc.)
- Smoking
- Physical Activity

Deprivation and Health Behaviours

As deprivation increases the proportion of people with risky health behaviour also increases.

Thus opportunities are likely to be greater in the core 20 most deprived communities.

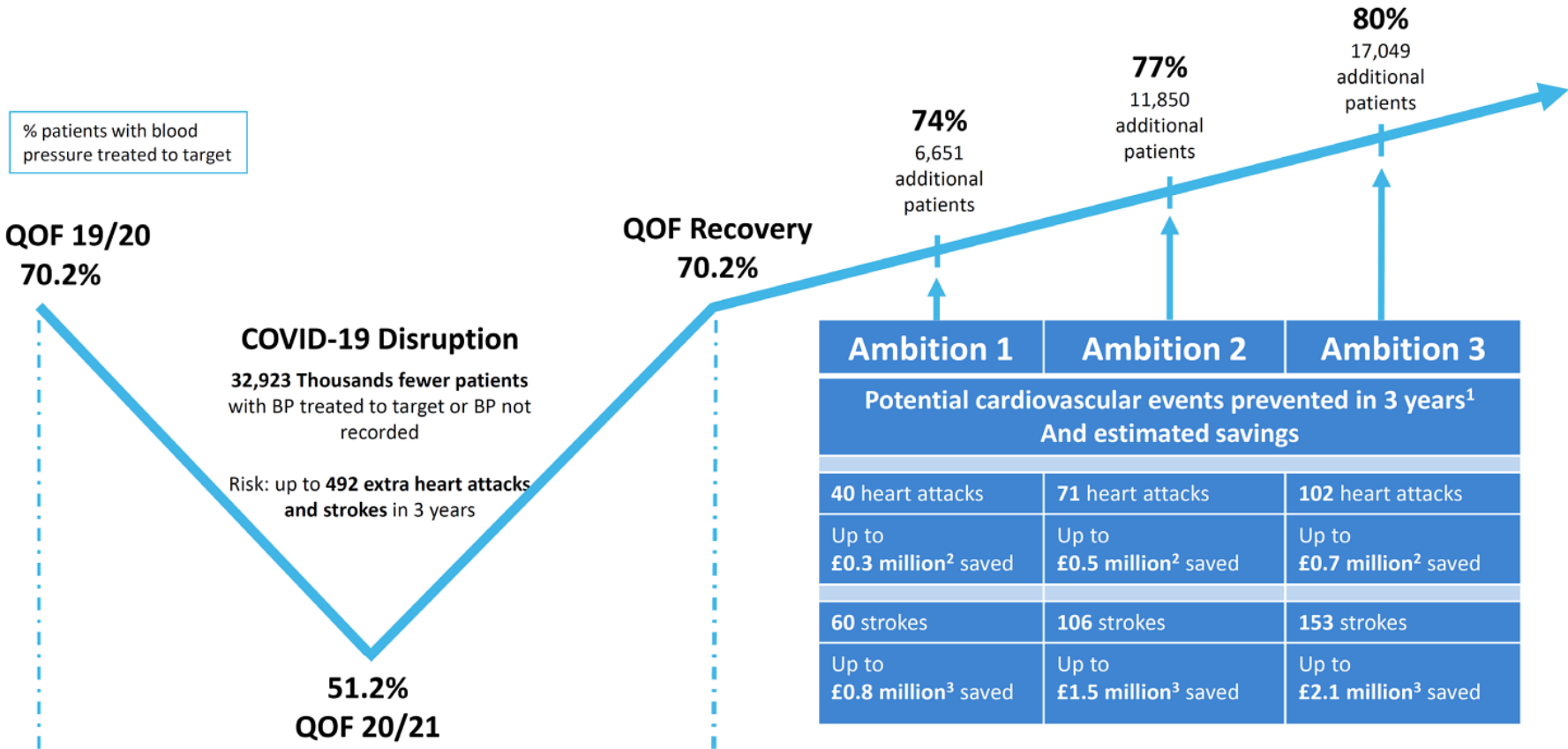
To reduce inequality in life expectancy due to circulatory conditions over the long term, we will have to address the deprivation gradient in health behaviours (smoking, physical activity, obesity and diet).



Size of the prize for Hypertension case finding and optimum management

additional 17,000 patients with more than 100 heart attacks prevented and more than 150 strokes prevented if we are able to implement the CVDprevent successfully.

Size of the Prize – Norfolk and Waveney Health and Care Partnership
BP Optimisation to Prevent Heart Attacks and Strokes at Scale



References

1. Public Health England and NHS England 2017 Size of the Prize
2. Royal College of Physicians (2016). Sentinel Stroke National Audit Programme. Cost and Cost-effectiveness analysis.
3. Kerr, M (2012). Chronic Kidney disease in England: The human and financial cost

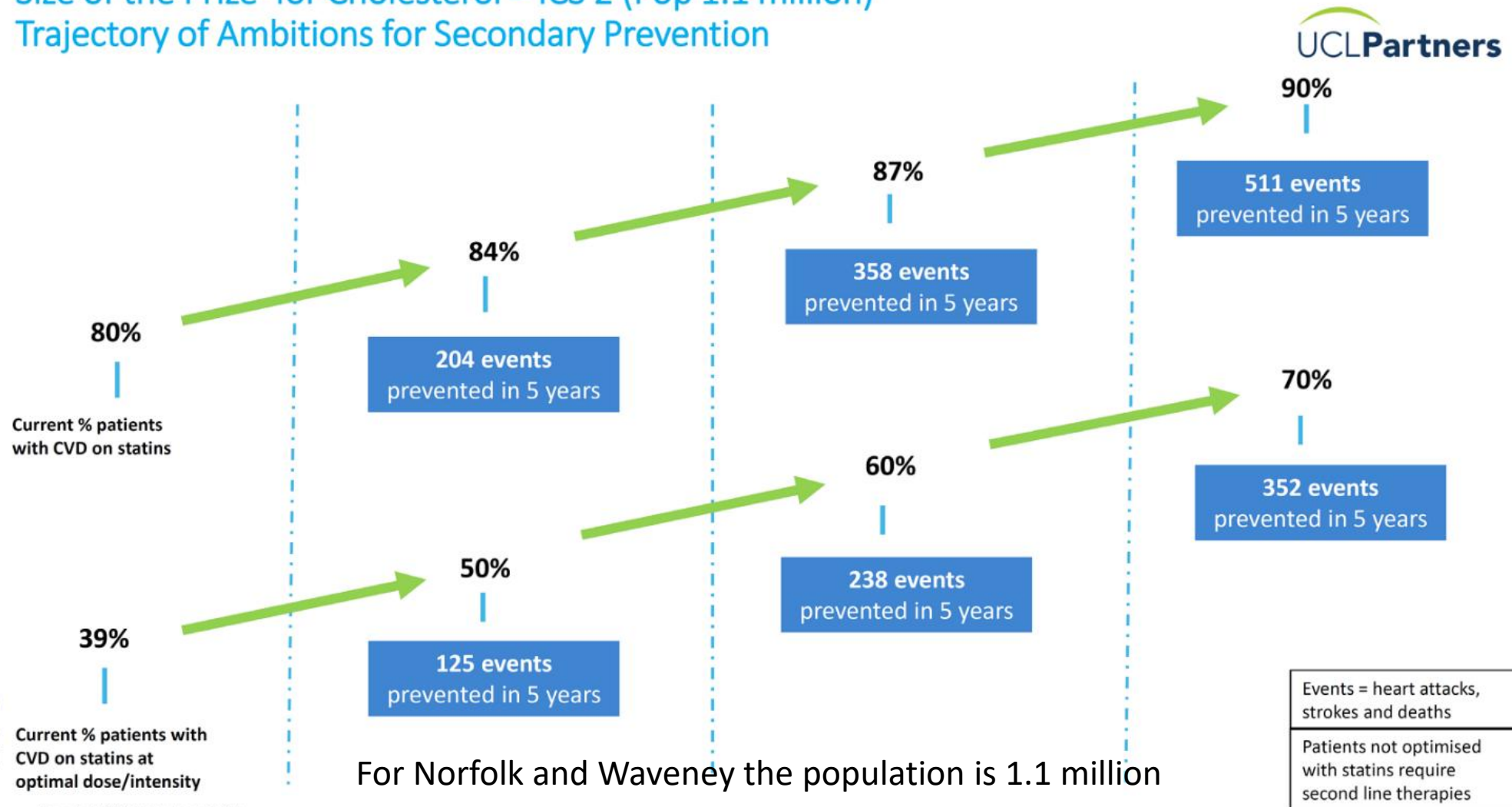
Modelling

Data source: NCVIN 2021. Briefing note: QOF 2020/21 Management of hypertension – HYPALL metric (HYP003 + HYP007). Potential events calculated with NNT (theNNT.com). For blood pressure, anti-hypertensive medicines for five years to prevent death, heart attacks, and strokes: 1 in 100 for heart attack, 1 in 67 for stroke.

Size of the prize for high cholesterol case finding and optimum management

more than 500 heart attacks and strokes prevented if we are able to implement CVDprevent successfully.

Size of the Prize for Cholesterol – ICS 2 (Pop 1.1 million)
Trajectory of Ambitions for Secondary Prevention



Nc
COUI

Current % patients with CVD on statins at optimal dose/intensity

Copyright © UCLPartners 2022

Recommendation:

- The ICB CVD Programme Board to work with ICP Colleagues to ensure a joined up approach in delivering the areas identified for CVD management
- Encourage and facilitate improved provision of integrated care, where all partners are involved

...so as to improve the cardiovascular health of the population of Norfolk and Waveney and to reduce inequalities in outcomes.

Contacts:

Abhijit Bagade: abhijit.bagade@norfolk.gov.uk

Suzanne Meredith: suzanne.meredith@norfolk.gov.uk,

Tim Winters: tim.winters@nhs.net

Josh Robotham: joshua.robatham@norfolk.gov.uk