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Health Inequalities Briefing Northumberland

Acknowledgements

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What are health inequalities?

“Health inequalities are differences between people or groups due to social, geographical, biological or other factors. These differences have a huge impact, because they result in people who are worst off experiencing poorer health and shorter lives.”

NICE

<https://www.nice.org.uk/advice/lgb4/chapter/introduction>

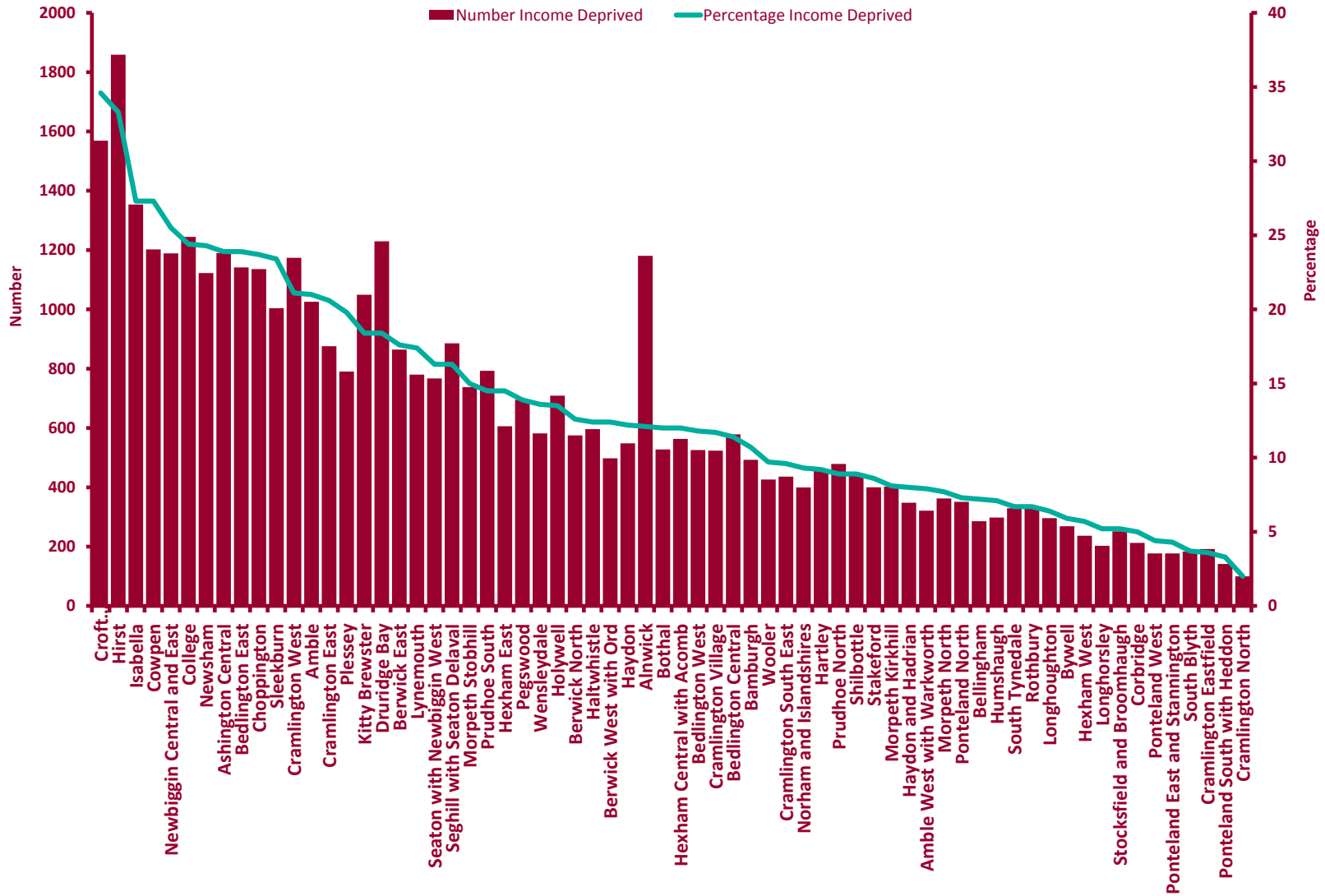
About the briefing

- The Global Burden of Disease (GBD) highlights the conditions causing the largest burden (in terms of disability-adjusted life years) in the North East
- The purpose of this briefing is to demonstrate inequalities in important high-burden diseases – defined either because they are high-burden as measured by the GBD¹, or because they are strongly associated with income deprivation locally (or both)
- This briefing also includes a number of indicators where there is the strongest statistical linear relationship with income deprivation at ward level
- It uses routinely available data from the Local Health website www.localhealth.org.uk
- This updated briefing uses 2015 ward boundaries and income deprivation data for 2015.

1. <http://thelancet.com/gbd>

Distribution of income deprivation across Northumberland

Income distribution by ward

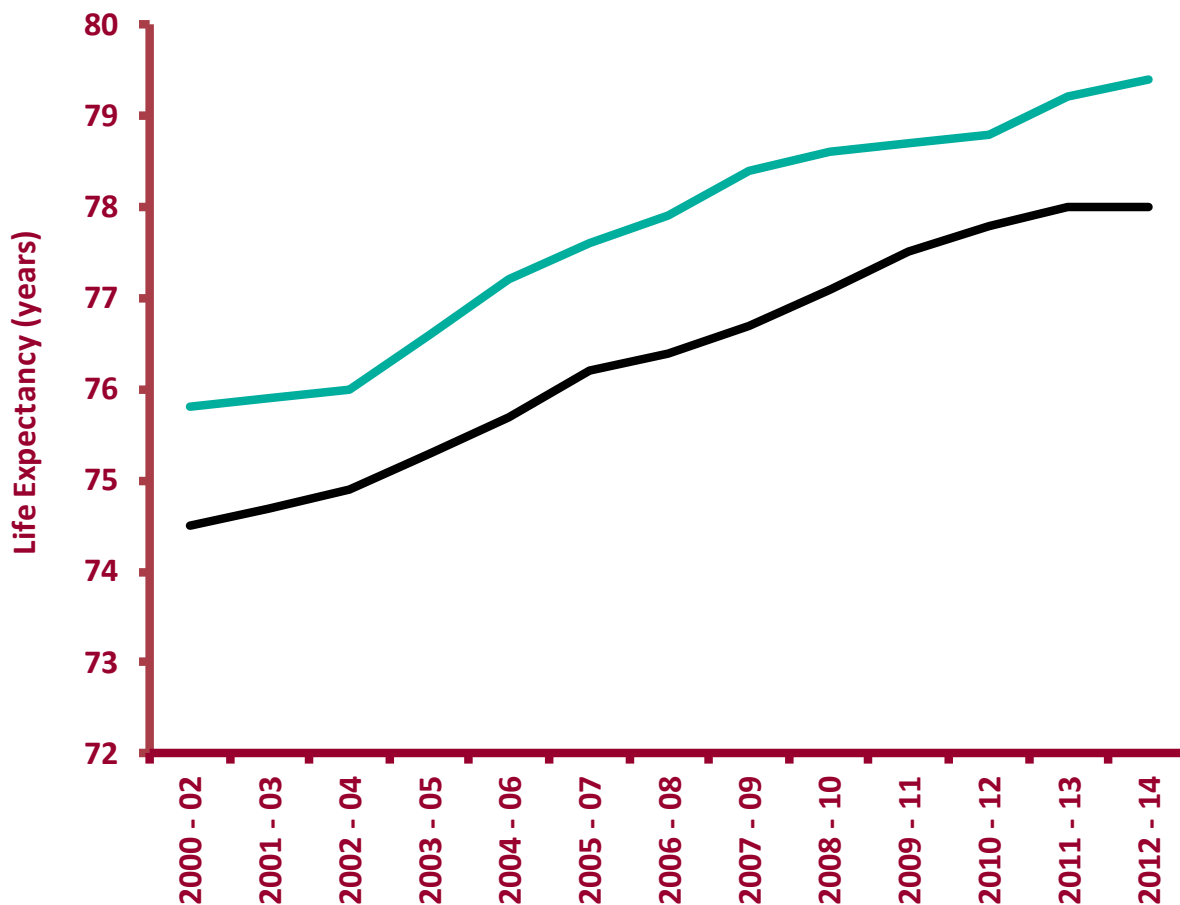


Life expectancy at birth (male)

Northumberland

North East

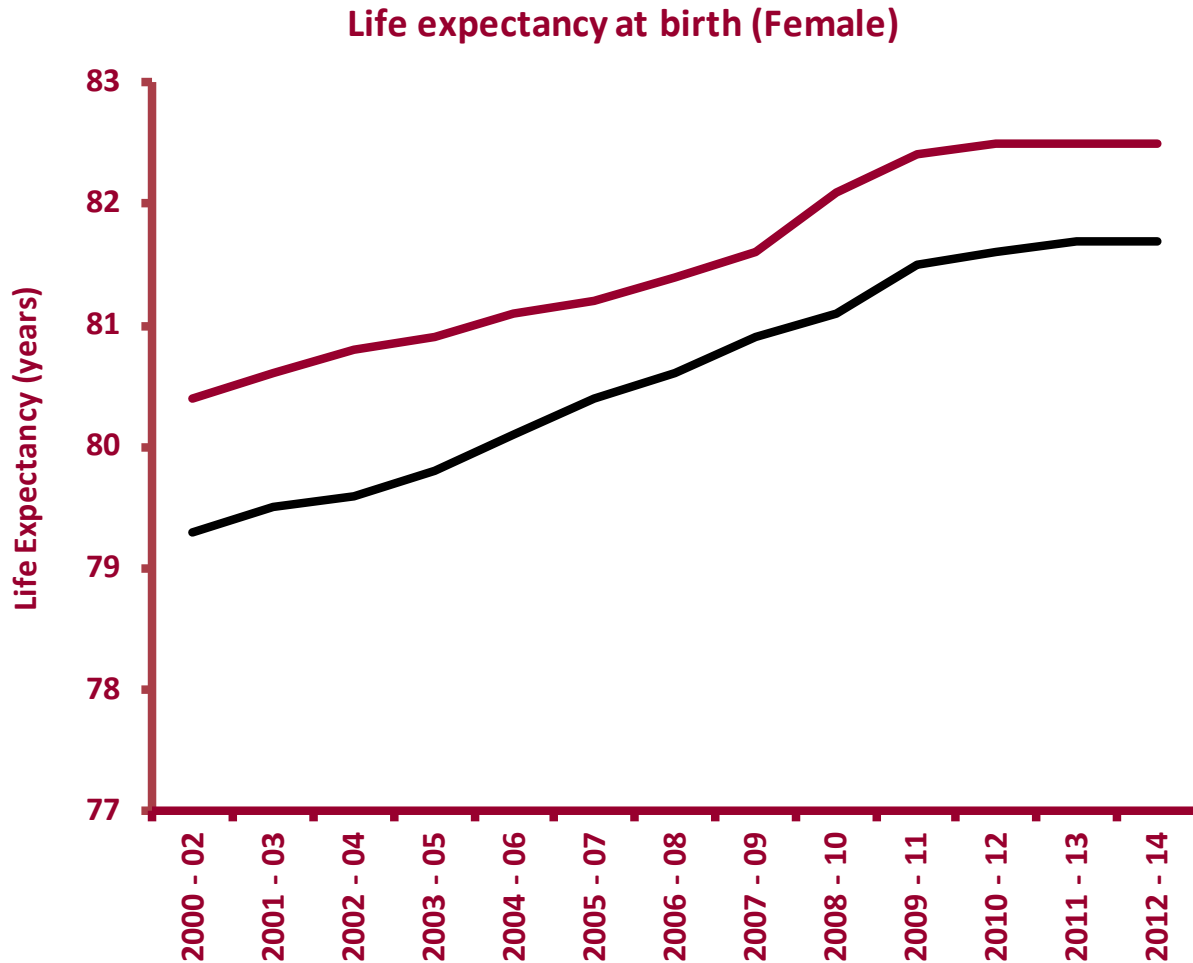
Life expectancy at birth (Male)



Life expectancy at birth (female)

Northumberland

North East

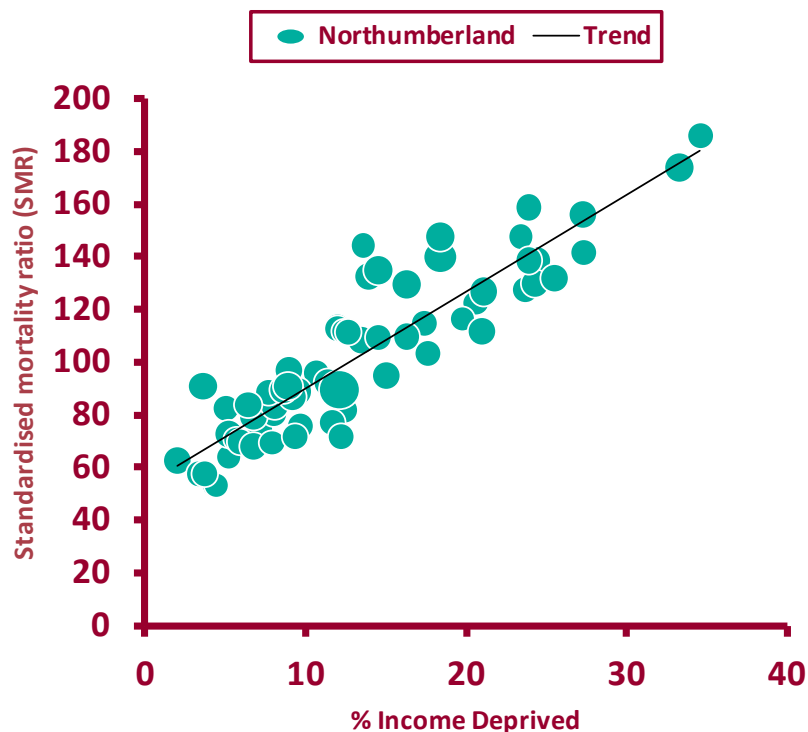


Premature mortality for Northumberland wards by % income deprivation

Deaths from all causes, under 75 years

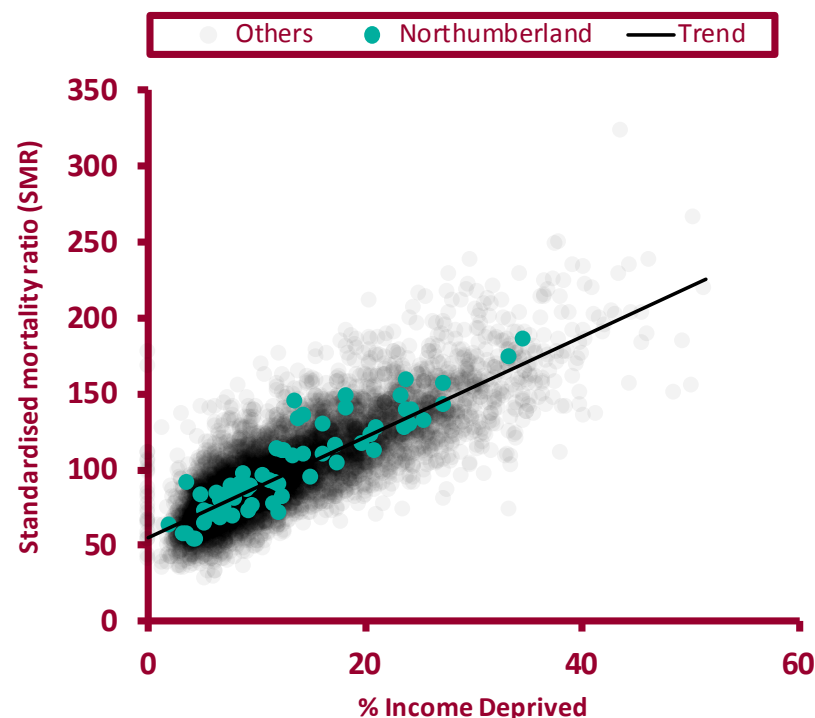
Northumberland

Deaths from all causes, under 75 years

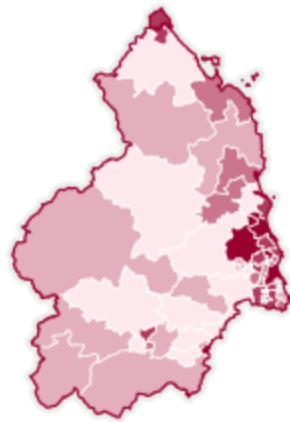


Within North East

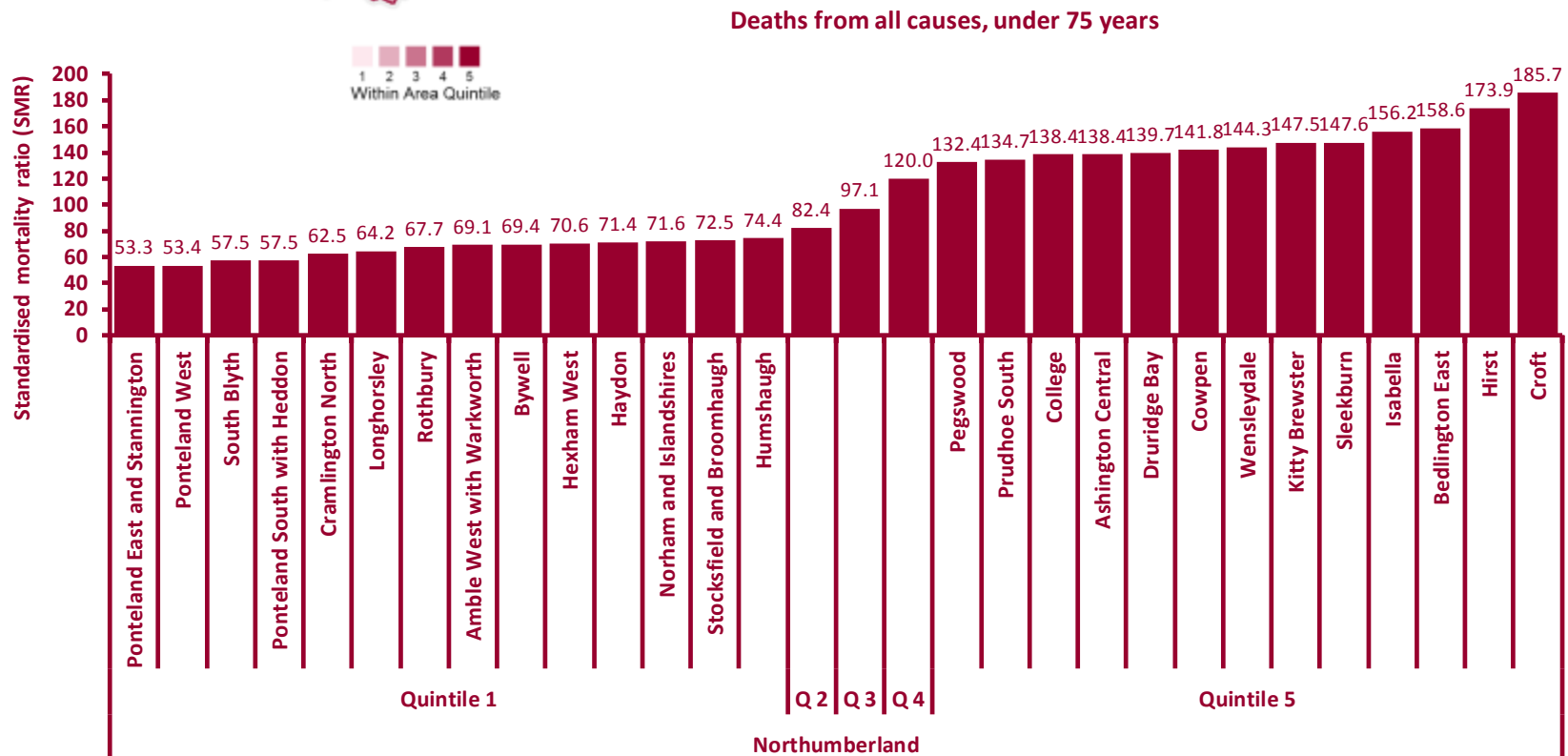
Deaths from all causes, under 75 years



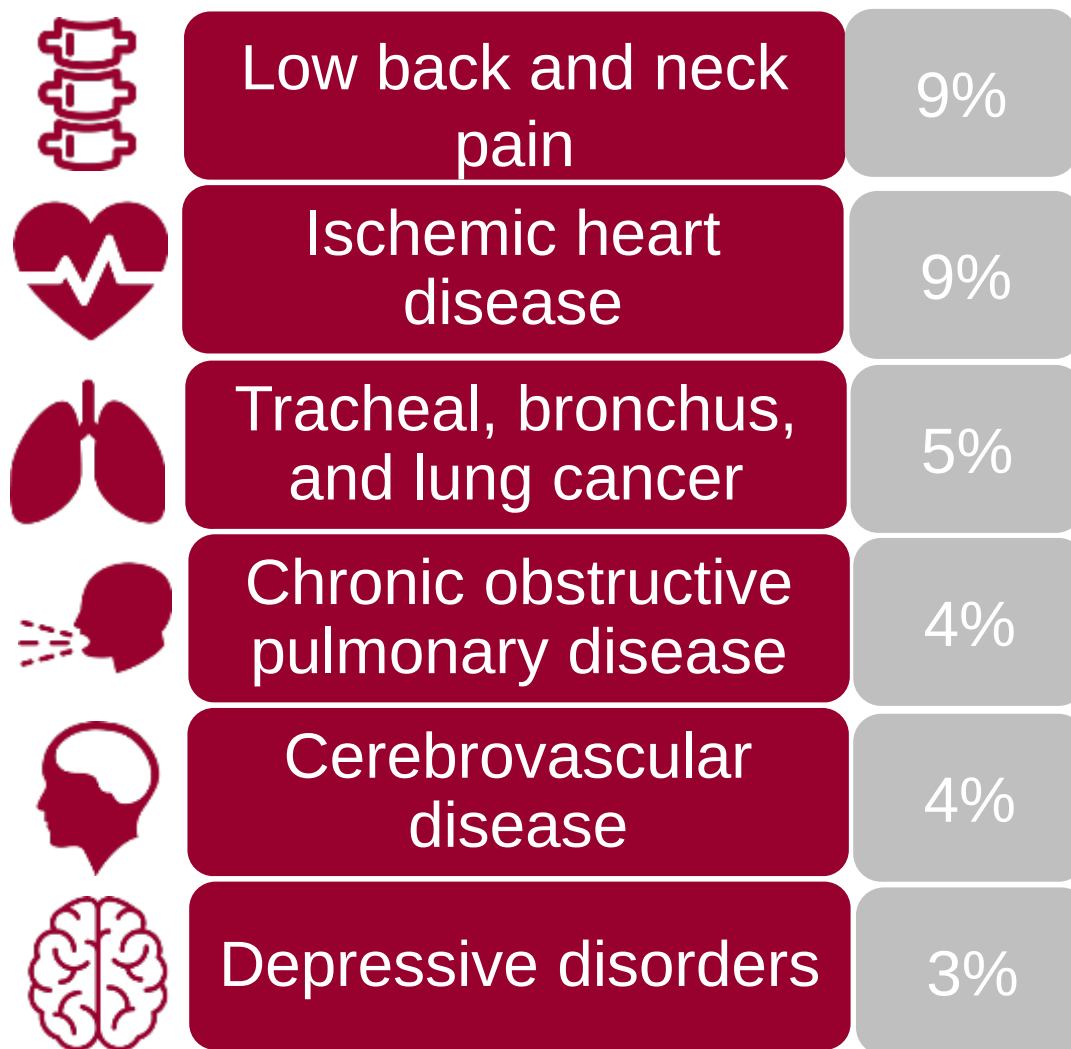
Northumberland
Deaths from all causes, under 75 years



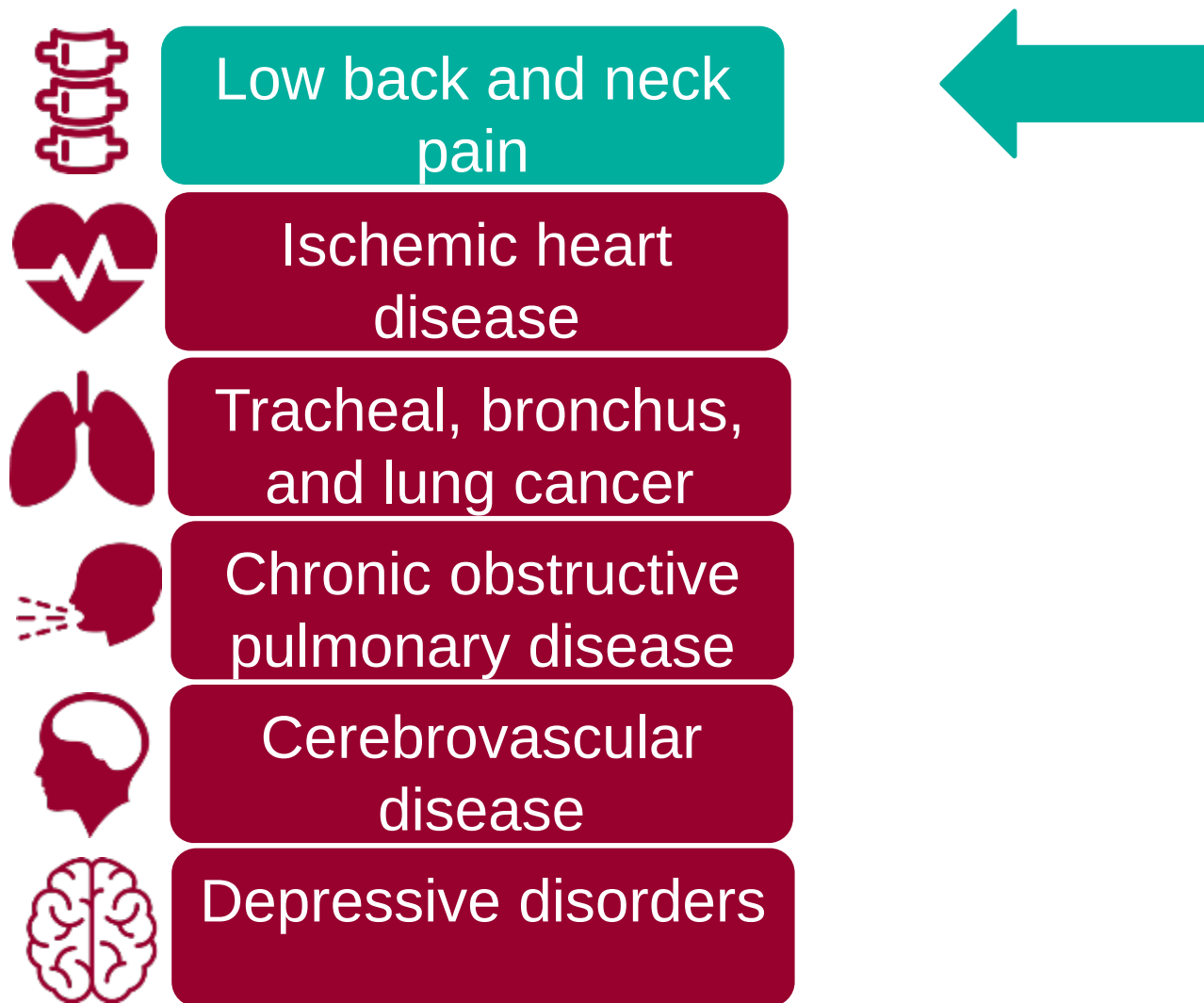
Premature mortality – Deaths from all causes, under 75 years



GBD: North East by cause



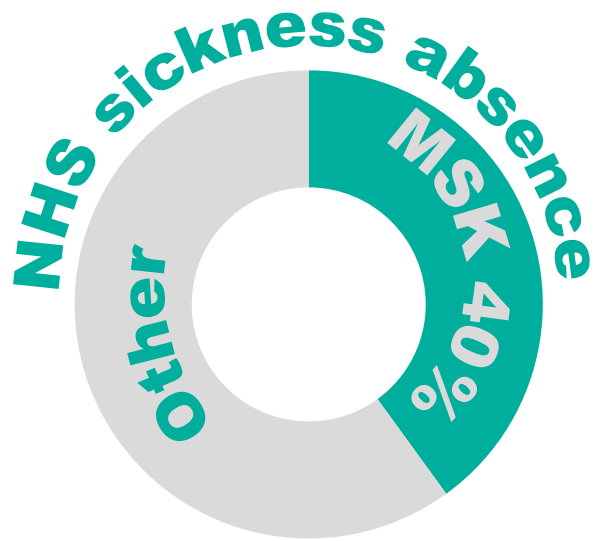
GBD: North East by cause



Musculoskeletal health: National picture



At every age physical activity reduces the risk of developing musculoskeletal conditions



Working days lost due to musculoskeletal conditions

7.5

million per year



Women who eat well and are active have babies that go on to have stronger bones



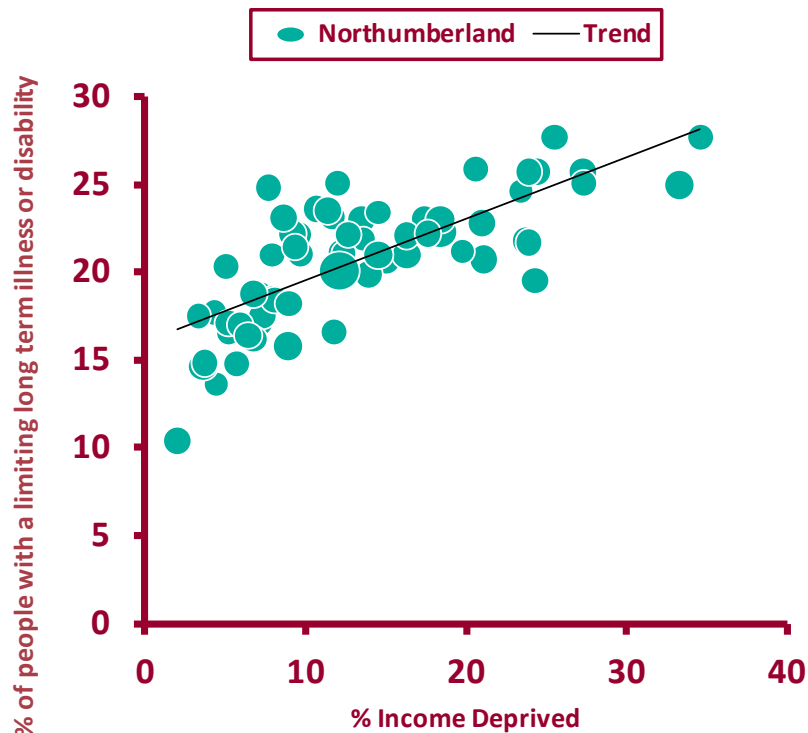
Being overweight or obese is associated with an increased risk of low back pain

Low back & neck pain

Limiting long term illness or disability

Northumberland

Limiting long term illness or disability

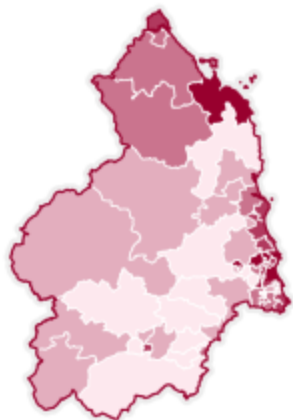


Within North East

Limiting long term illness or disability

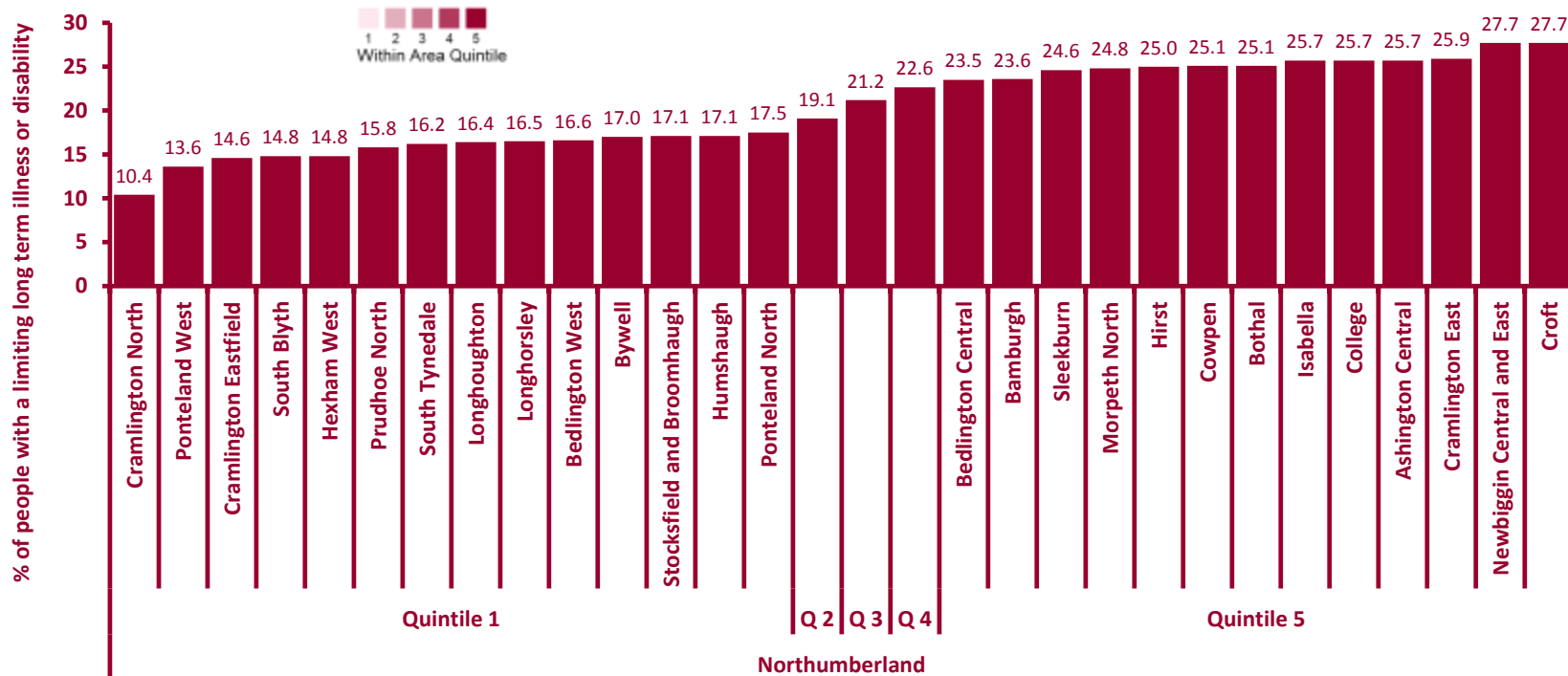


Northumberland
Limiting long term illness or disability

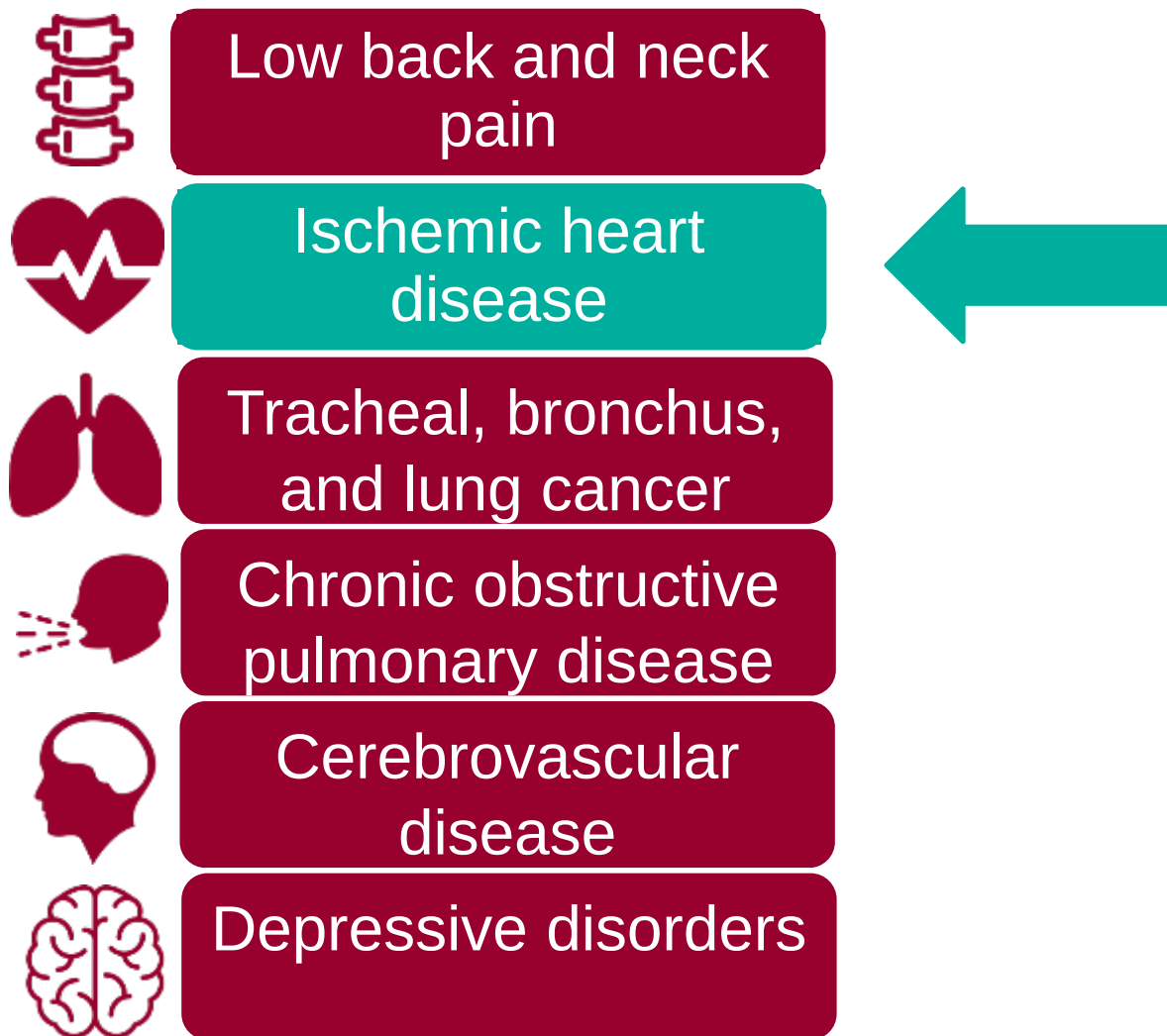


Limiting long term illness or disability

Limiting long term illness or disability



GBD: North East by cause



Ischaemic heart disease: National picture



1 in 6 men



1 in 10 women

will die from ischaemic heart disease



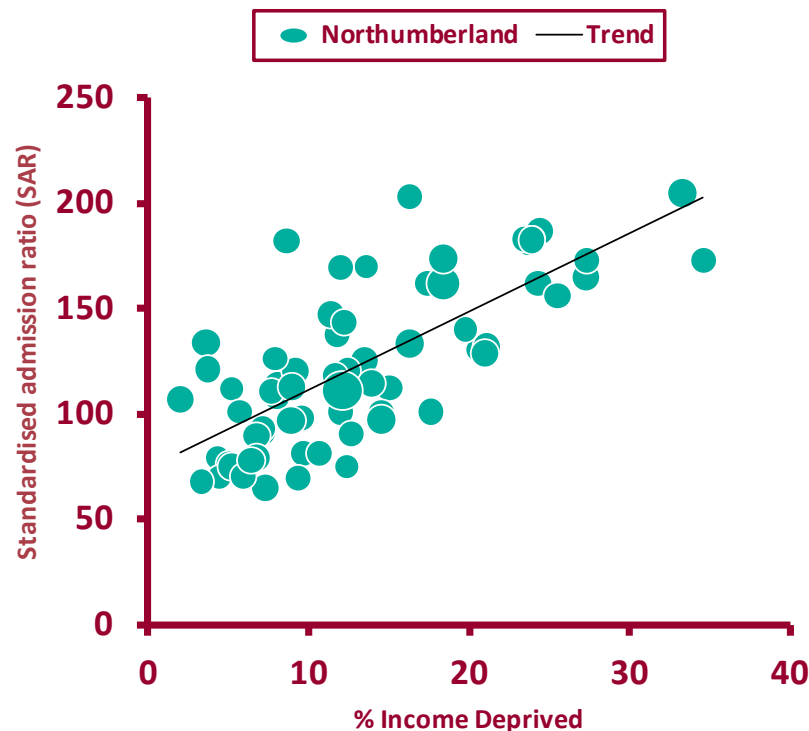
Ischaemic heart disease

Emergency hospital admissions for CHD



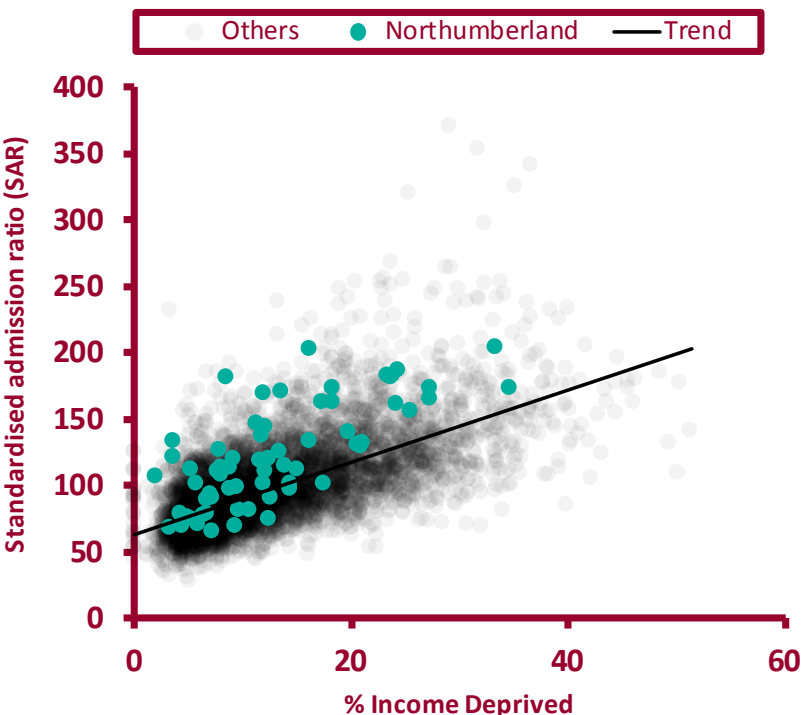
Northumberland

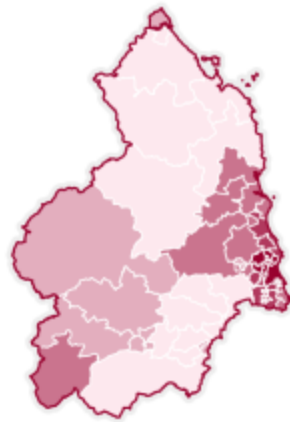
Emergency hospital admissions for CHD



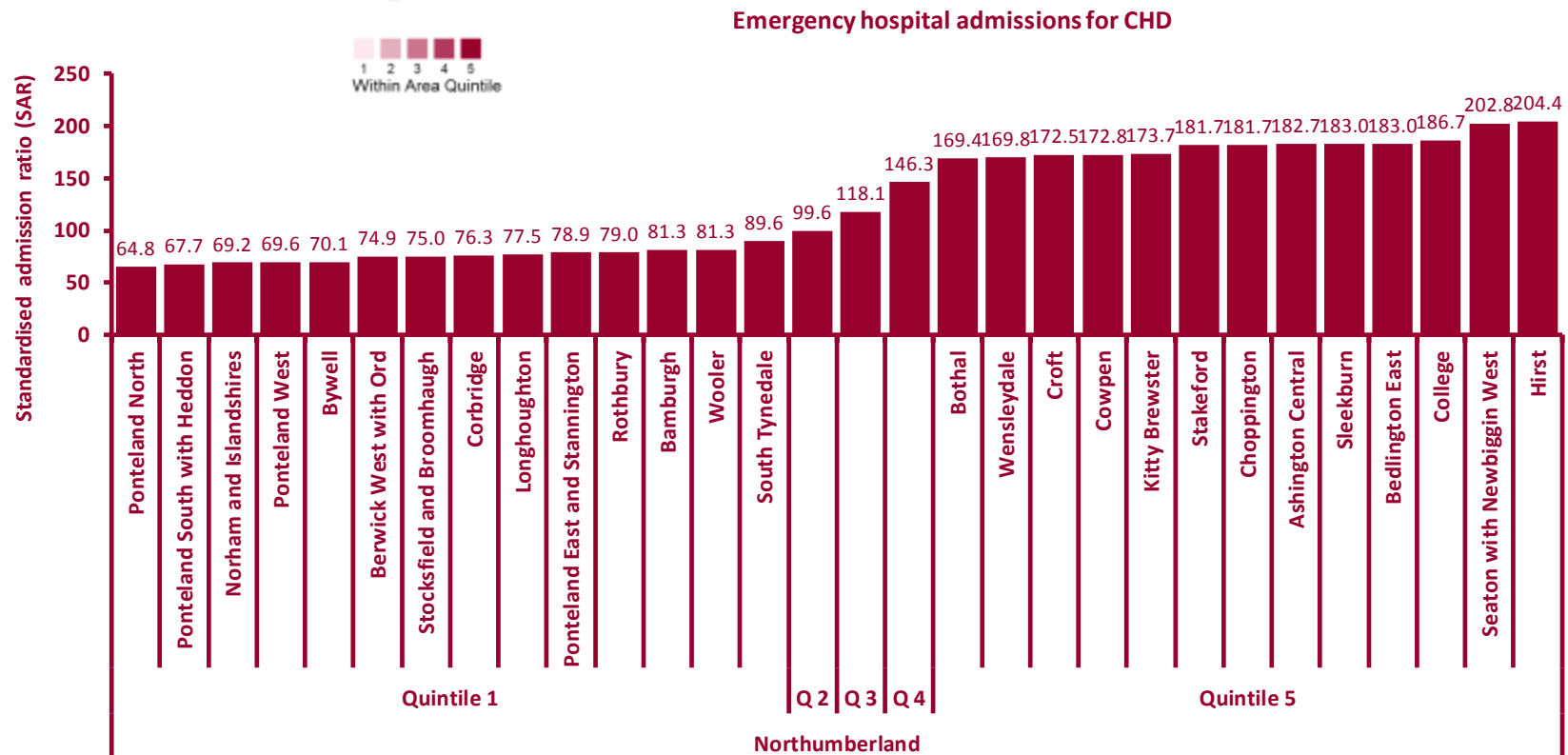
Within North East

Emergency hospital admissions for CHD

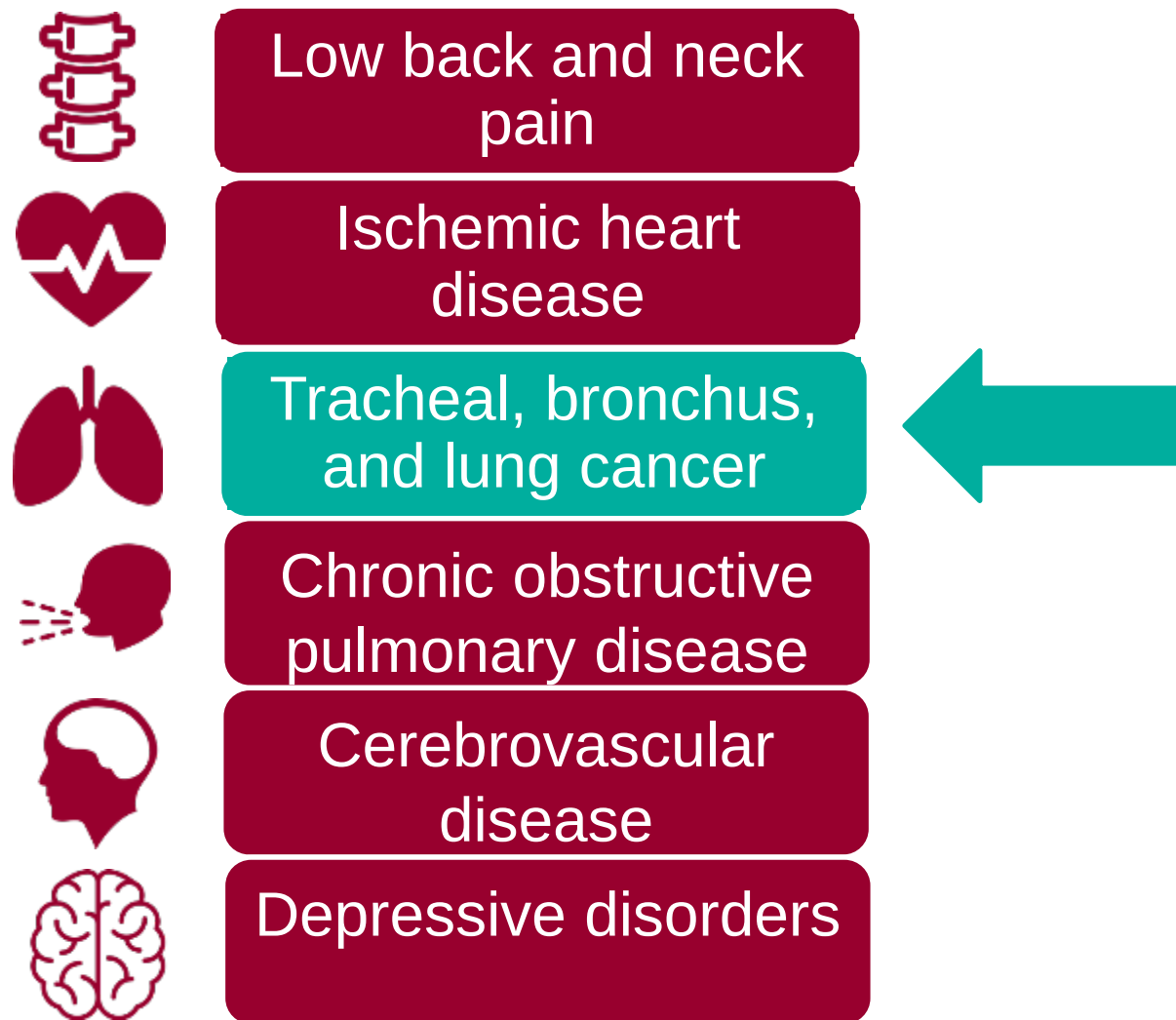




Emergency hospital admissions for CHD



GBD: North East by cause



Lung cancer incidence: National picture

Over 3,500 lung cancer deaths could be avoided each year if the UK matched the European lung cancer survival average



It kills **96** people **every day** in the UK

Lung cancer incidence: National picture



Smoking is the main avoidable
risk factor for lung cancer, linked
to an estimated

86%

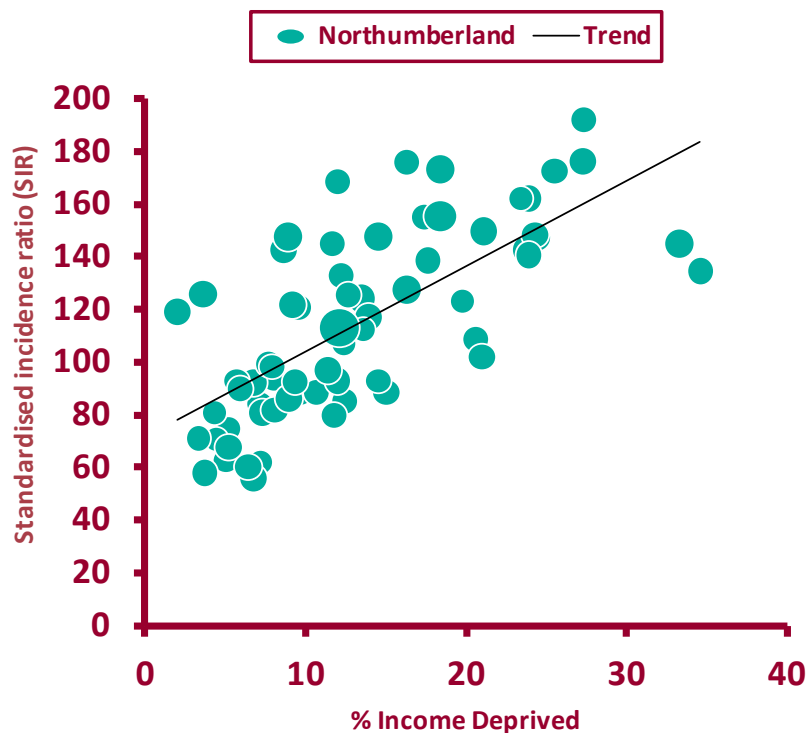
of lung cancer cases in the UK

Cancer Research UK

Lung cancer incidence

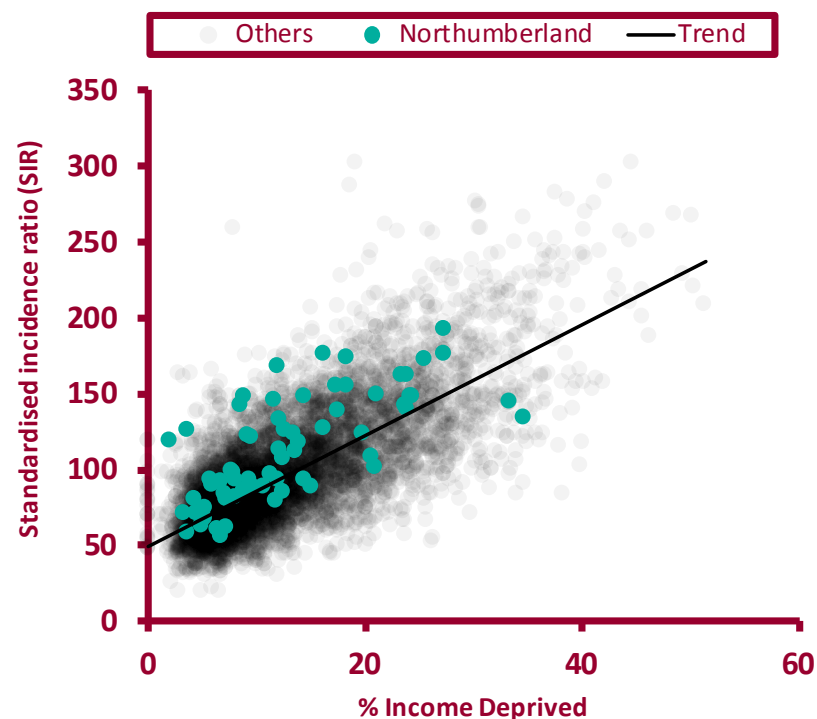
Northumberland

Incidence of lung cancer

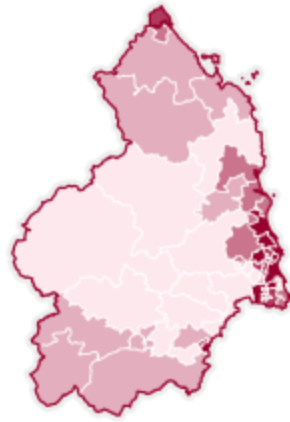


Within North East

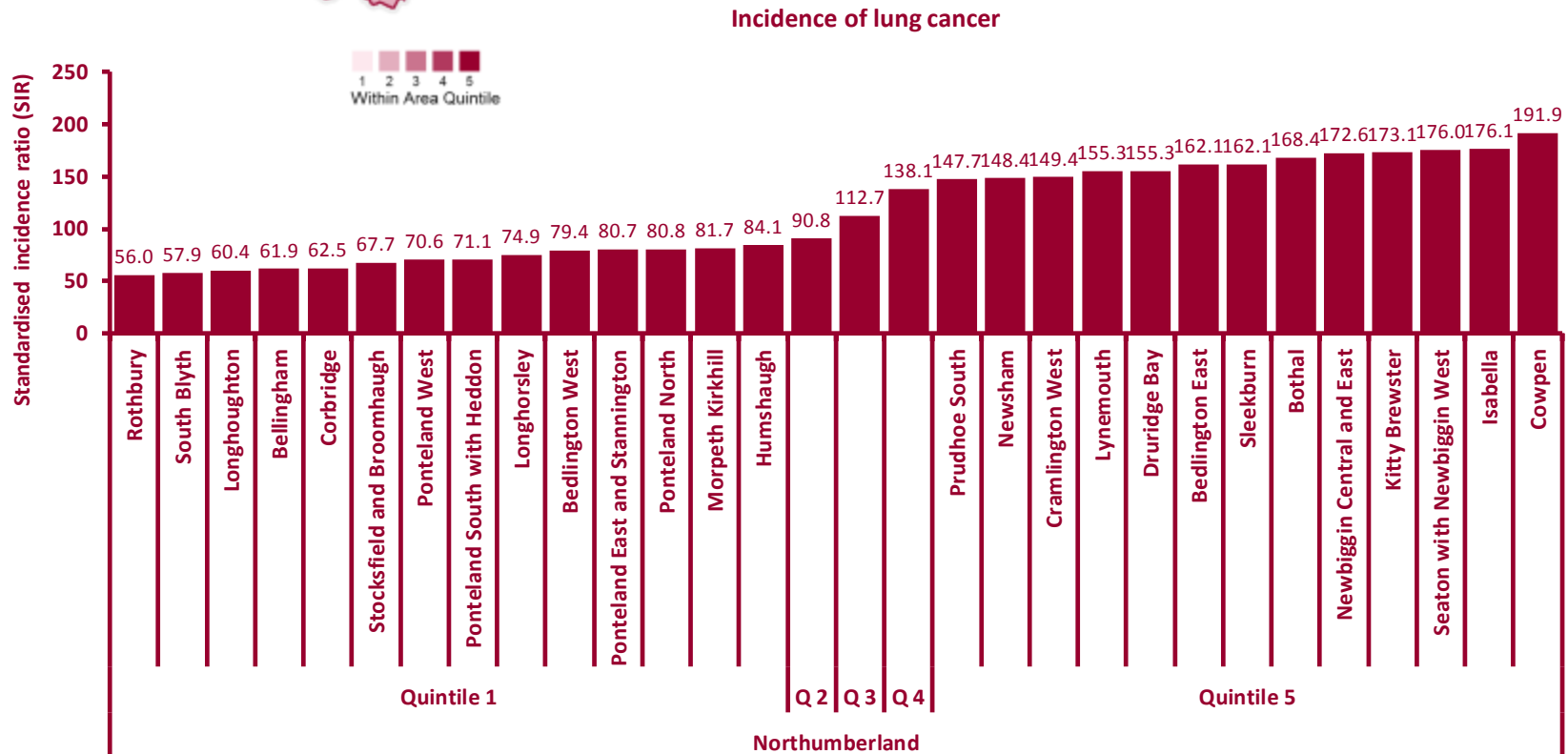
Incidence of lung cancer



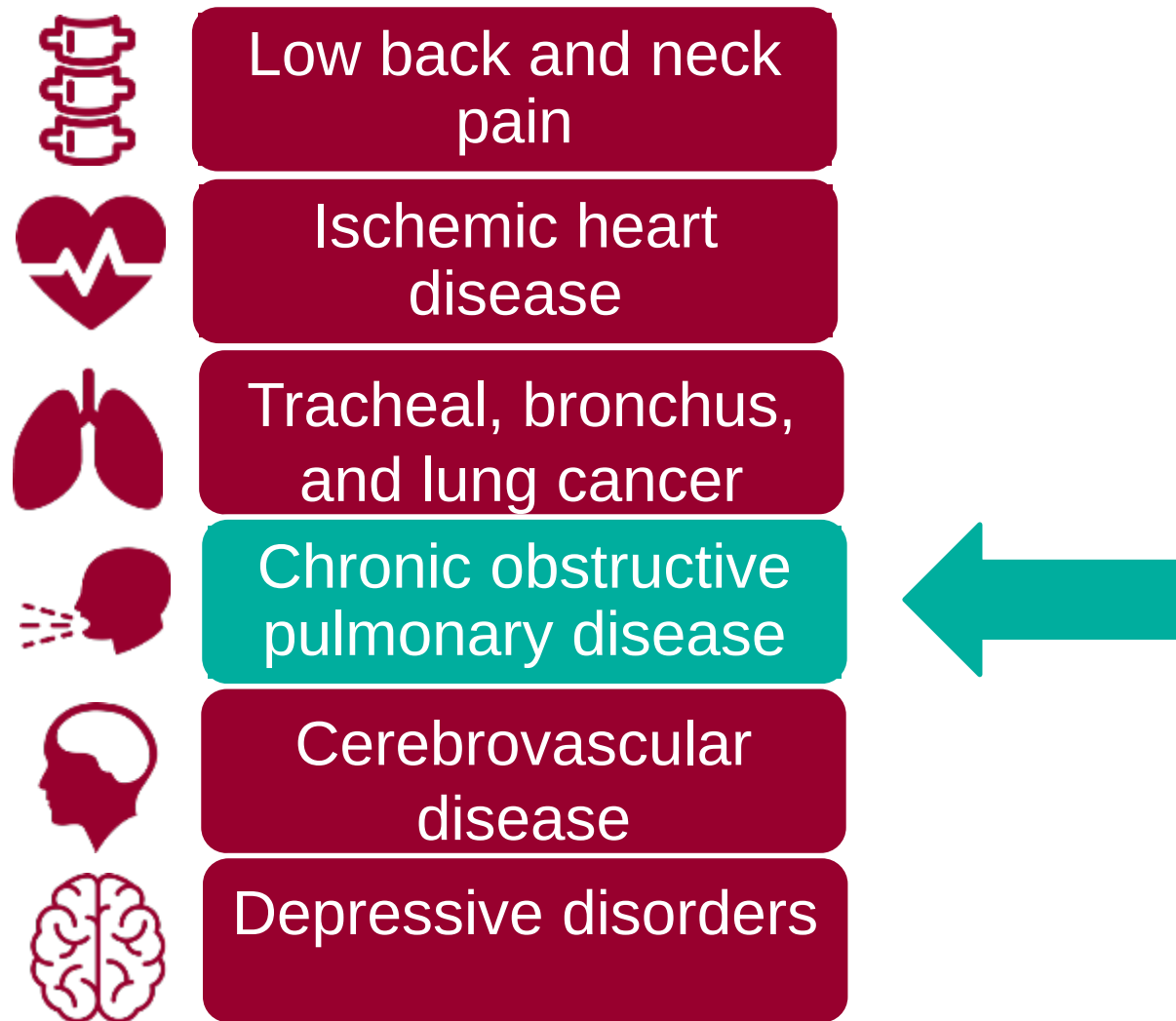
Northumberland
Incidence of lung cancer



Lung cancer incidence



GBD: North East by cause



Chronic obstructive pulmonary disease: National picture

25,000
deaths a year in the UK

3,000,000
people with COPD in
the UK

1/3
of these have been
diagnosed

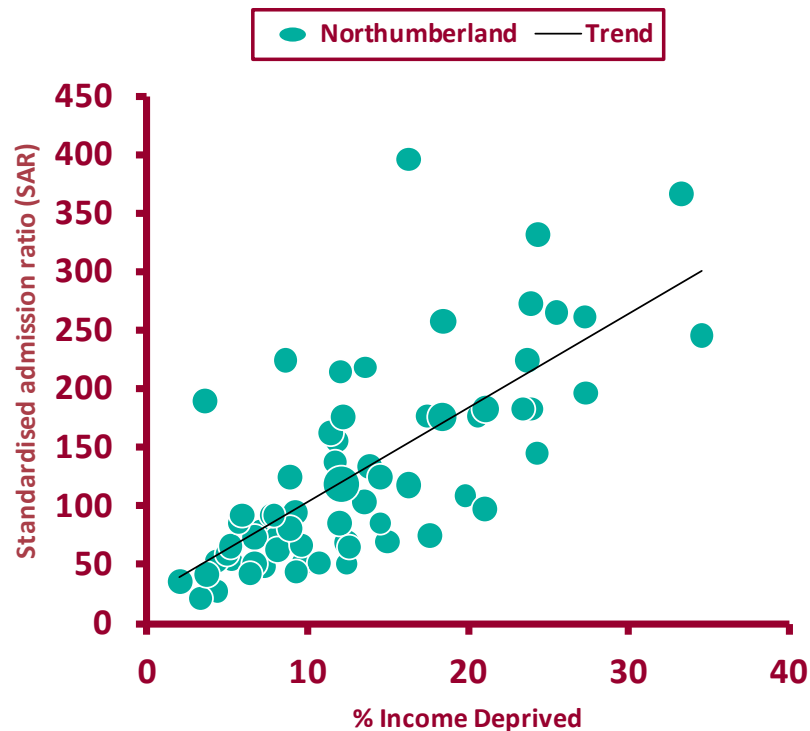


Chronic obstructive pulmonary disease

Emergency hospital admissions for COPD

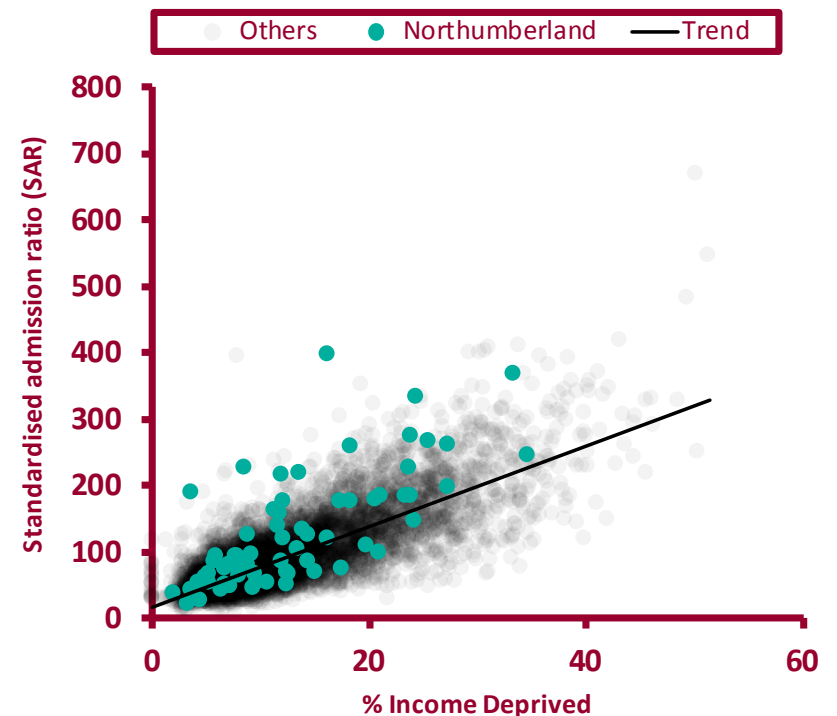
Northumberland

Emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD)

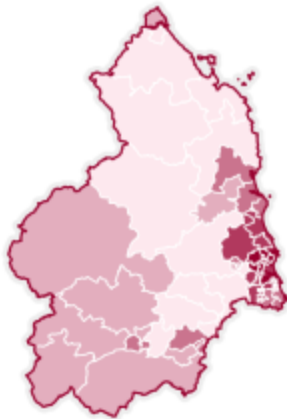


Within North East

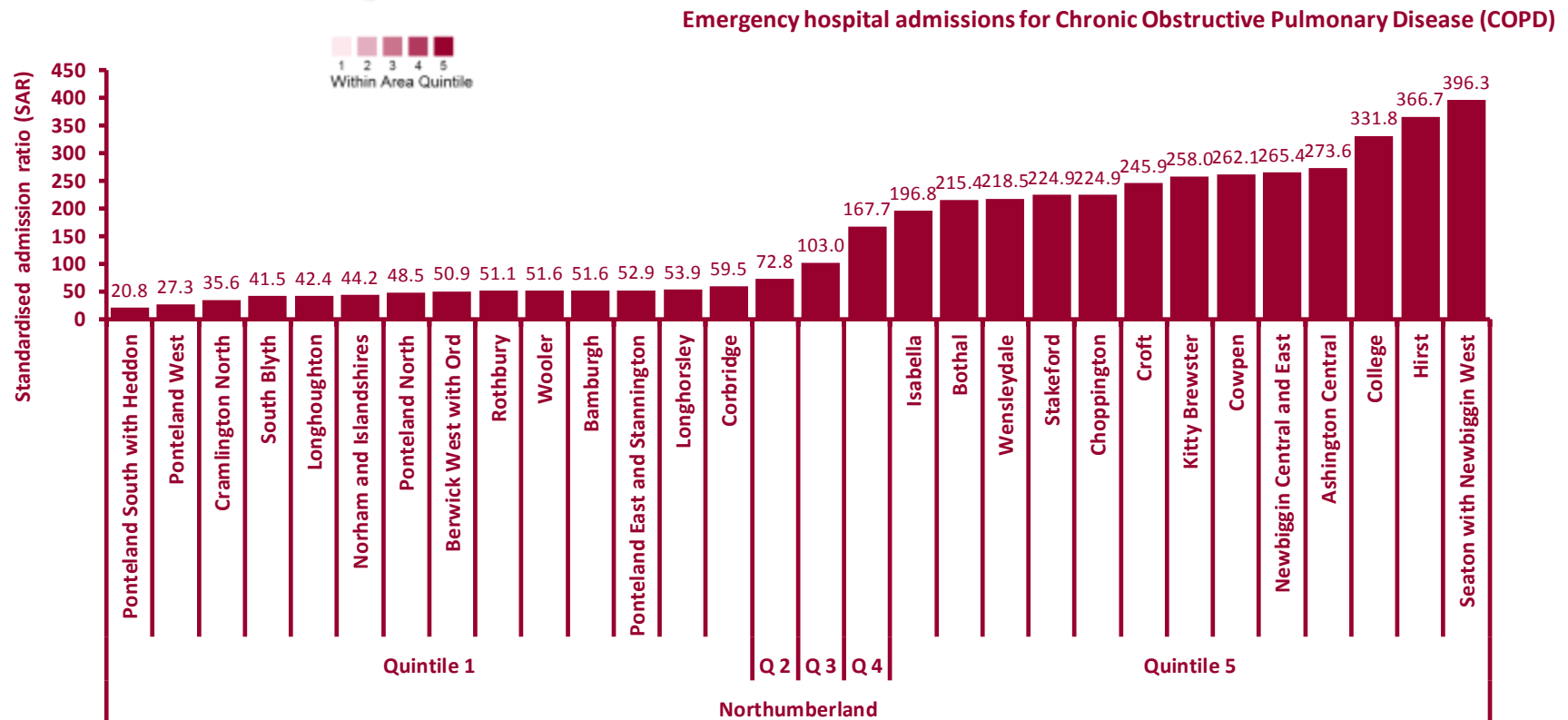
Emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD)



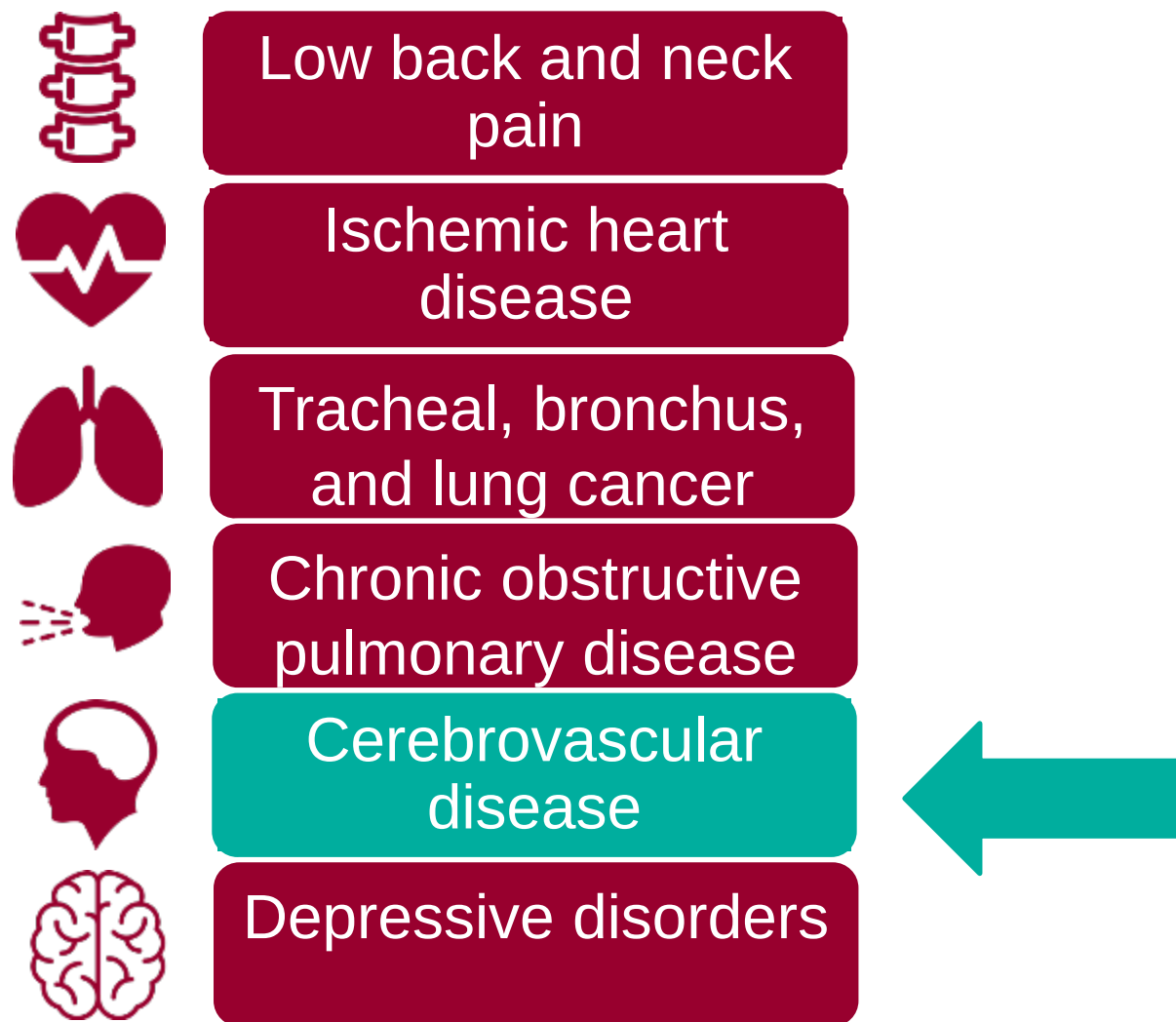
Northumberland Emergency hospital admissions for COPD



Emergency hospital admissions for COPD



GBD: North East by cause



Cerebrovascular disease: National picture



1 in 6 men



1 in 5 women

**will have a stroke by
the age of 75**



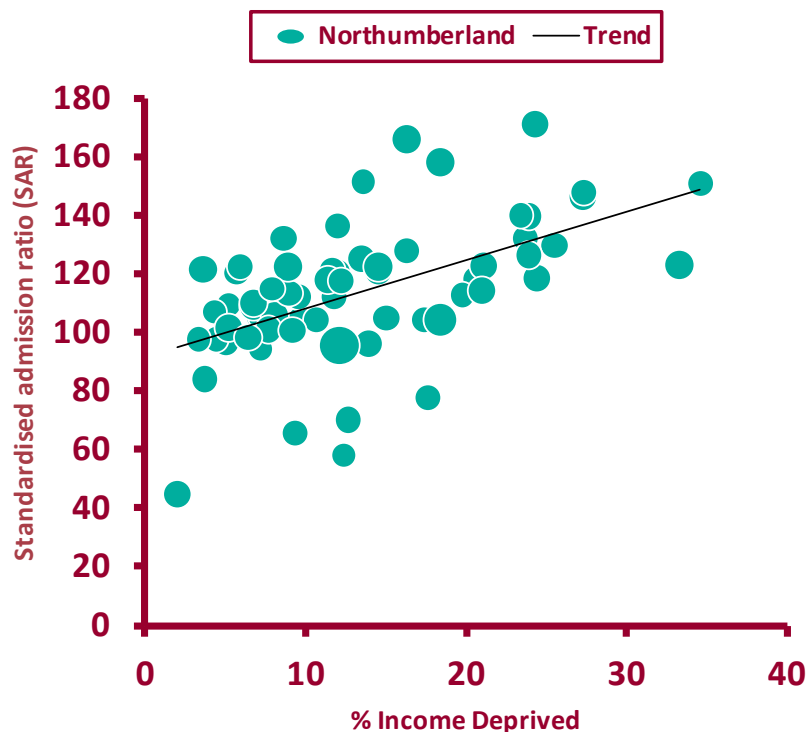
**Stroke is one of the
largest causes of
disability – half of all
stroke survivors have a
disability.**

Cerebrovascular disease

Emergency hospital admissions for stroke

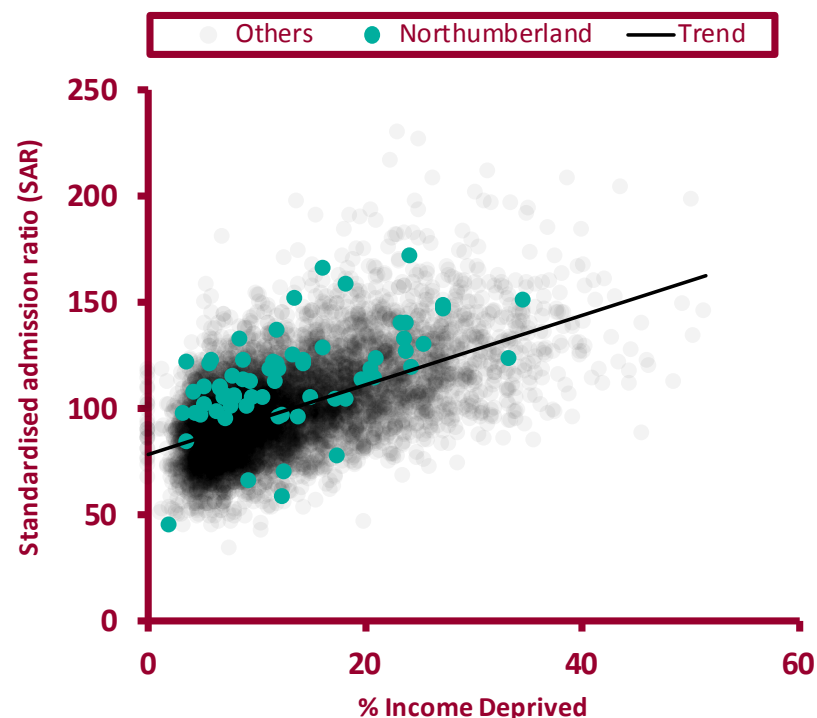
Northumberland

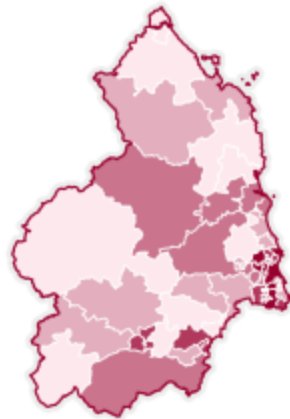
Emergency hospital admissions for stroke



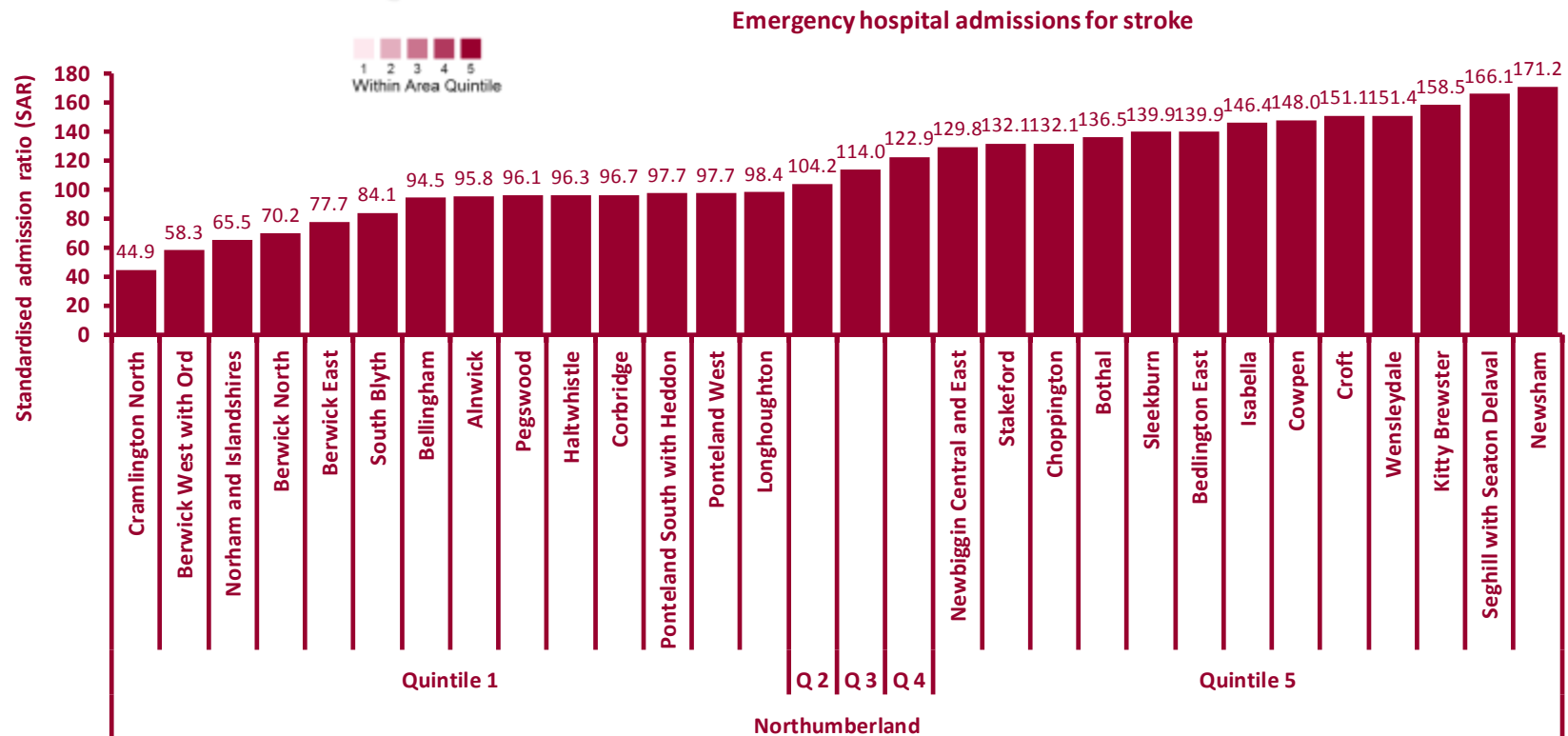
Within North East

Emergency hospital admissions for stroke

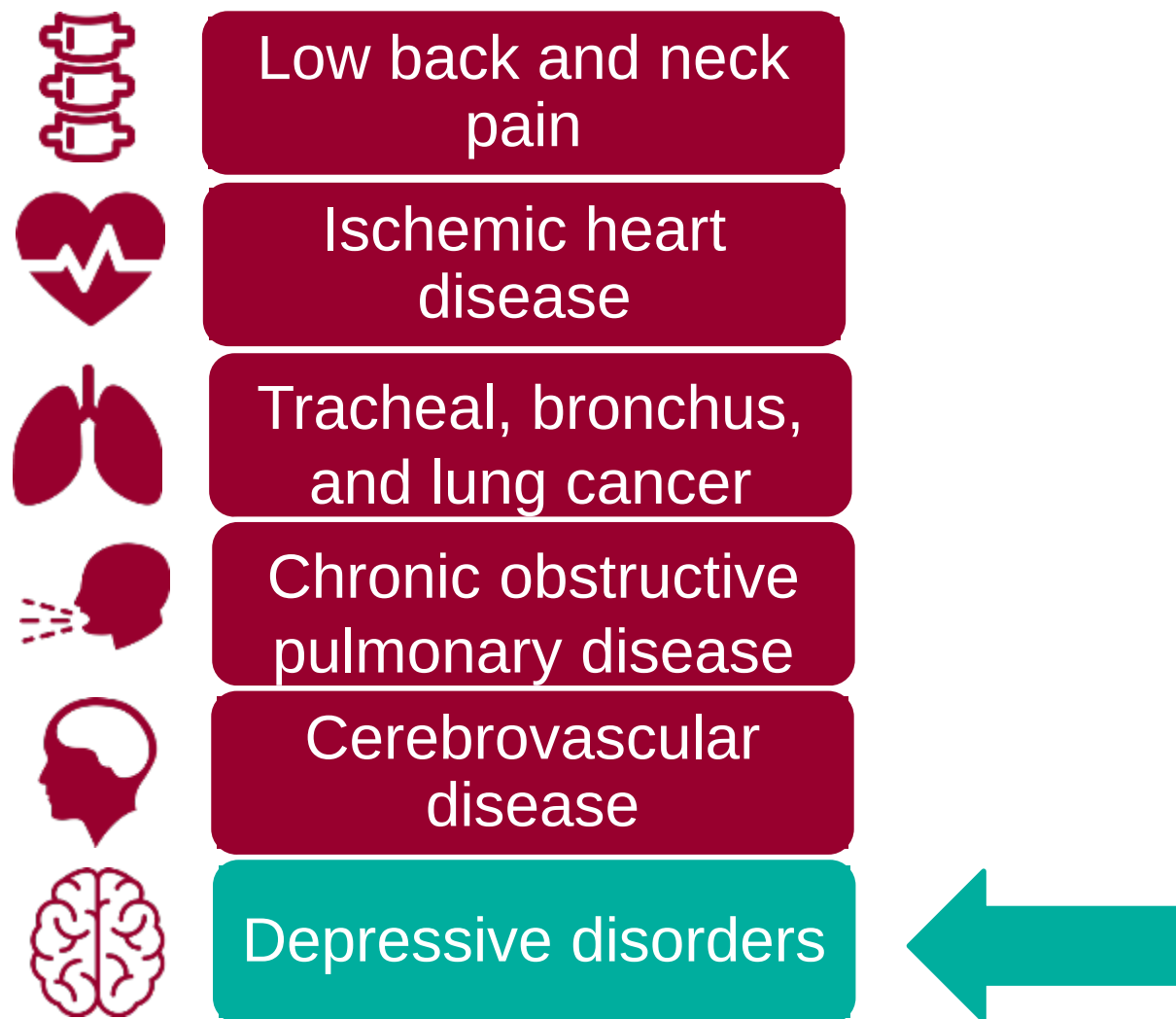




Emergency hospital admissions for stroke



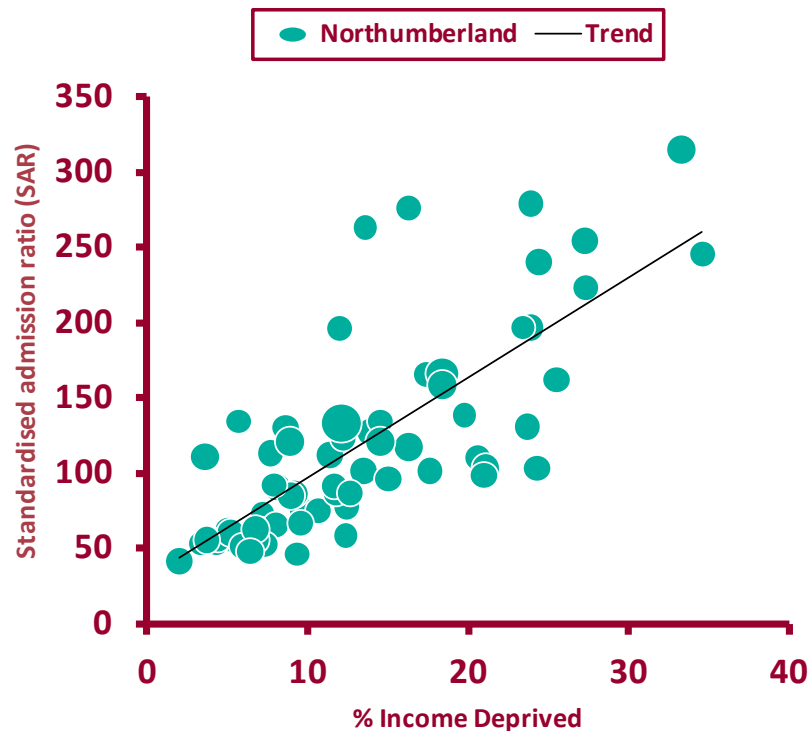
GBD: North East by cause



Hospital stays for self harm

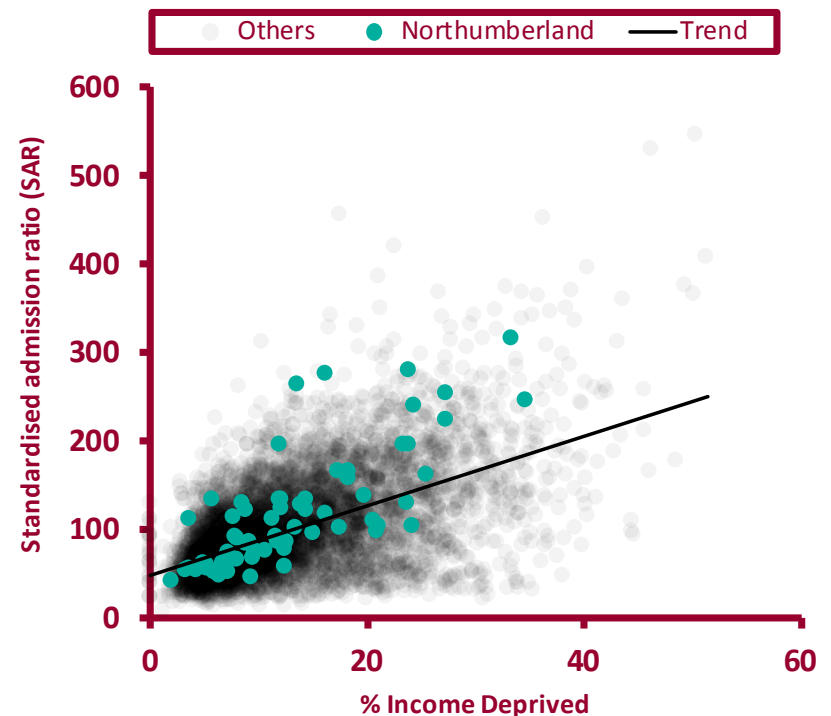
Northumberland

Hospital stays for self harm

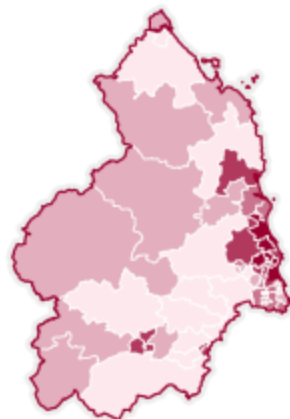


Within North East

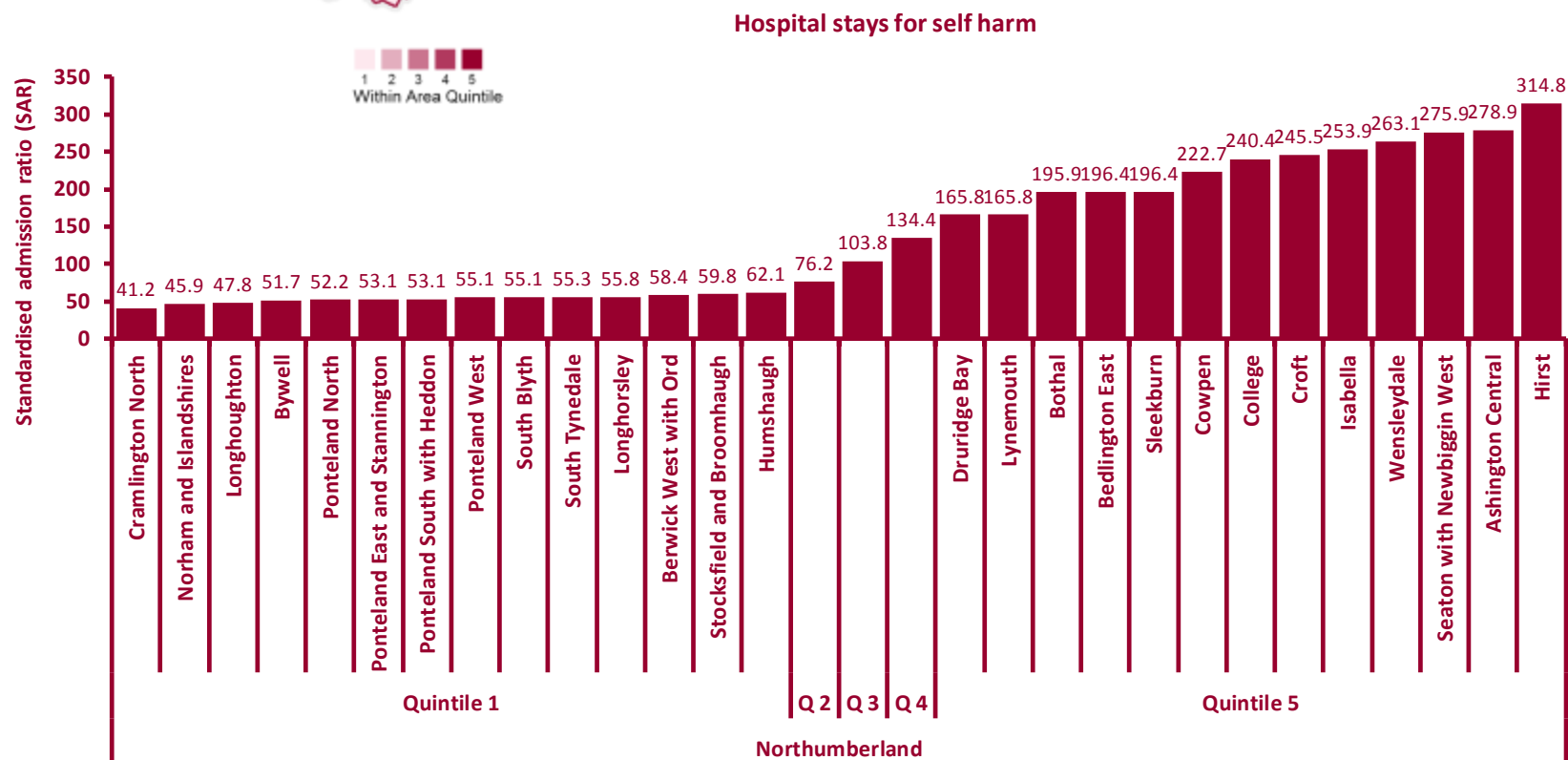
Hospital stays for self harm



Northumberland
Hospital stays for self harm



Hospital stays for self-harm



Health inequalities within local authority

Some other indicators show a particularly strong association with income deprivation



Based on this association, we have selected a few indicators to discuss, where the observed variation seems to have a relationship with income deprivation

Health inequalities within local authority

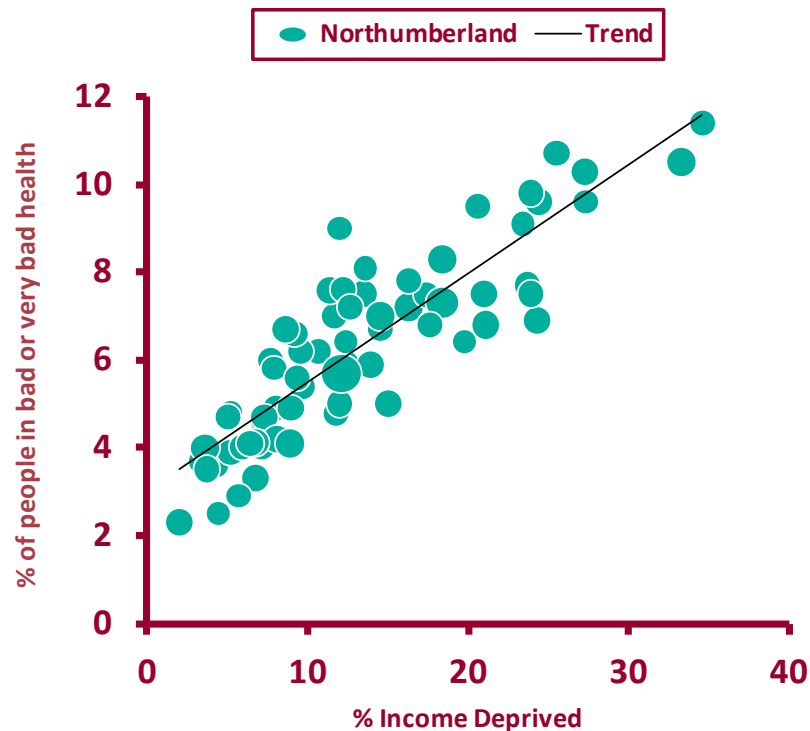
The table below provides information on the association between income deprivation and a variety of indicators. A higher R squared value indicates a stronger association, whilst a larger standardised slope value indicates the effect size of this association (this can be positive or negative)

Indicator	 R Squared Value	Standardised Slope
Deaths from all causes, under 75 years	0.81	3.5%
General Health - bad or very bad	0.78	4.5%
Deaths from all causes, under 65 years	0.73	3.5%
Deaths from respiratory diseases, all ages	0.70	4.7%
Deaths from circulatory disease, under 75 years	0.61	3.5%
General Health - very bad	0.60	4.0%
Hospital stays for self harm	0.59	6.7%
Deaths from all causes, all ages	0.59	2.5%
Healthy eating adults	0.57	-1.8%
Hospital stays for alcohol related harm	0.56	2.9%
Limiting long term illness or disability	0.56	2.0%
Emergency hospital admissions for CHD	0.55	3.6%
GCSE Achievement	0.54	-2.4%
Deaths from circulatory disease, all ages	0.52	2.1%
Emergency hospital admissions for COPD	0.52	7.4%
Fertility Rate	0.51	1.6%
Deaths from all cancer, under 75 years	0.50	2.3%
Incidence of lung cancer	0.49	3.0%
Emergency hospital admissions for all causes	0.48	2.6%
Deaths from all cancer, all ages	0.47	1.7%

General Health - bad or very bad

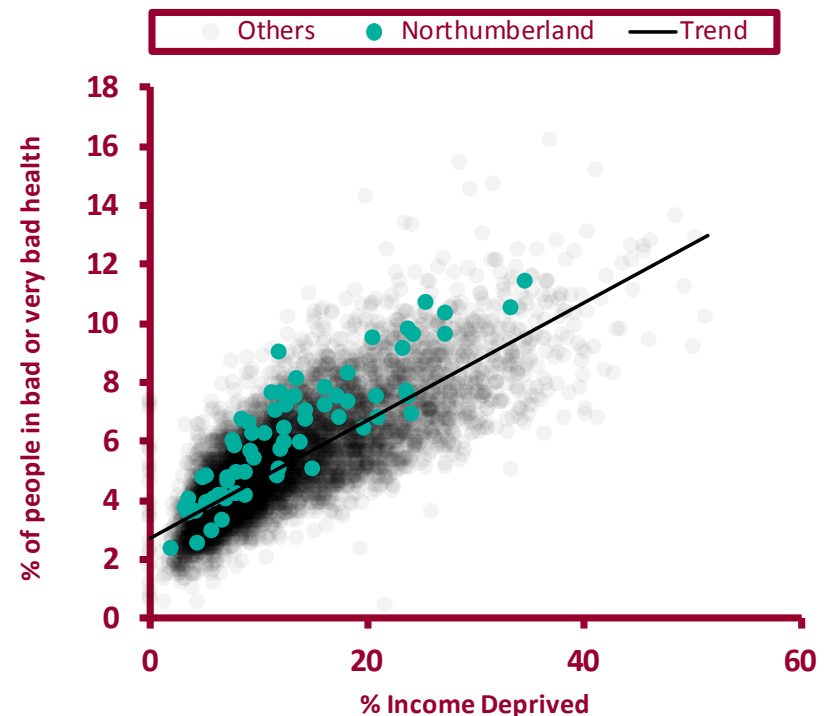
Northumberland

General Health - bad or very bad

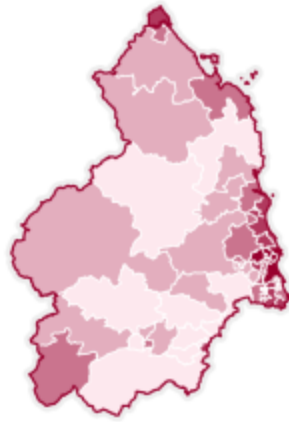


Within North East

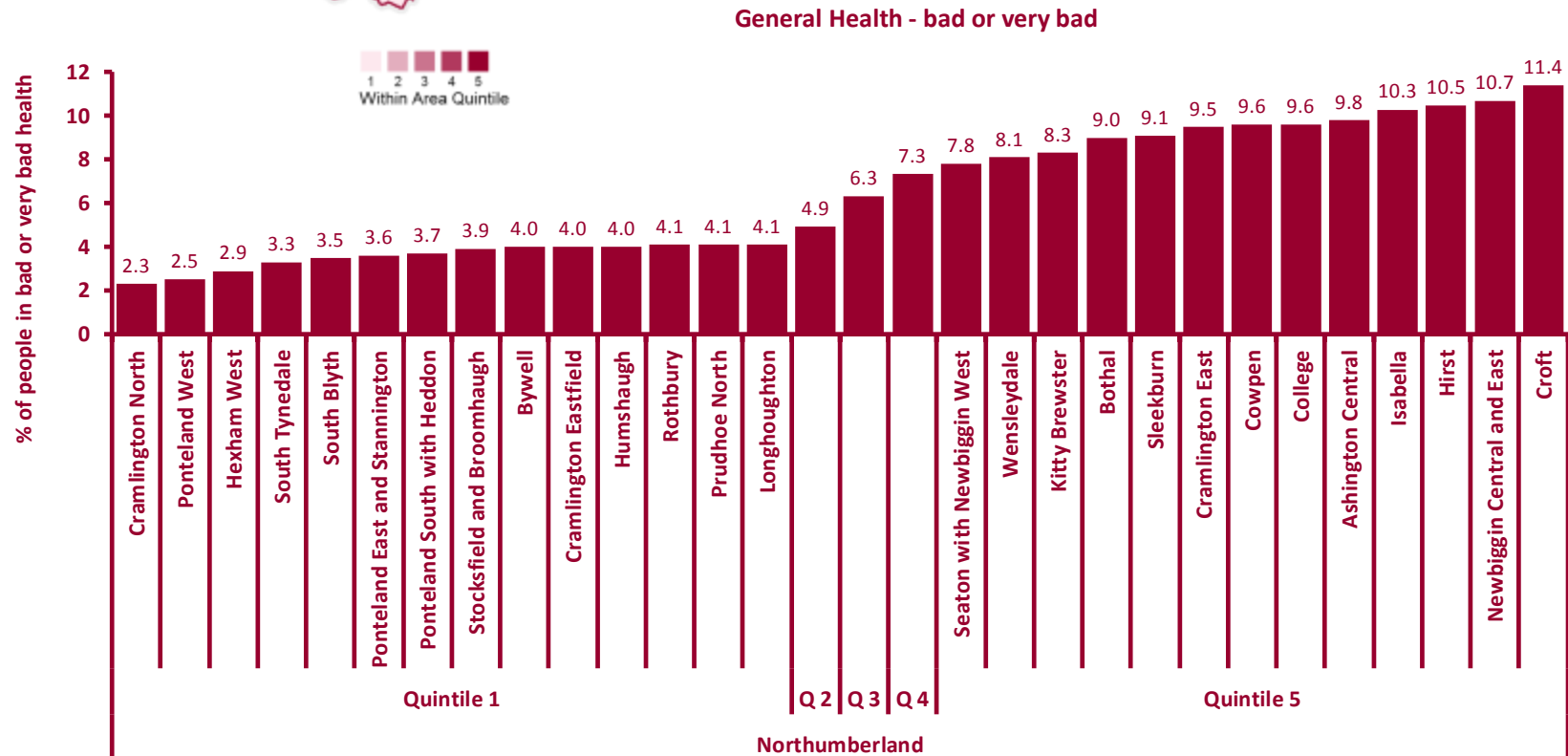
General Health - bad or very bad



Northumberland
General Health - bad or very bad



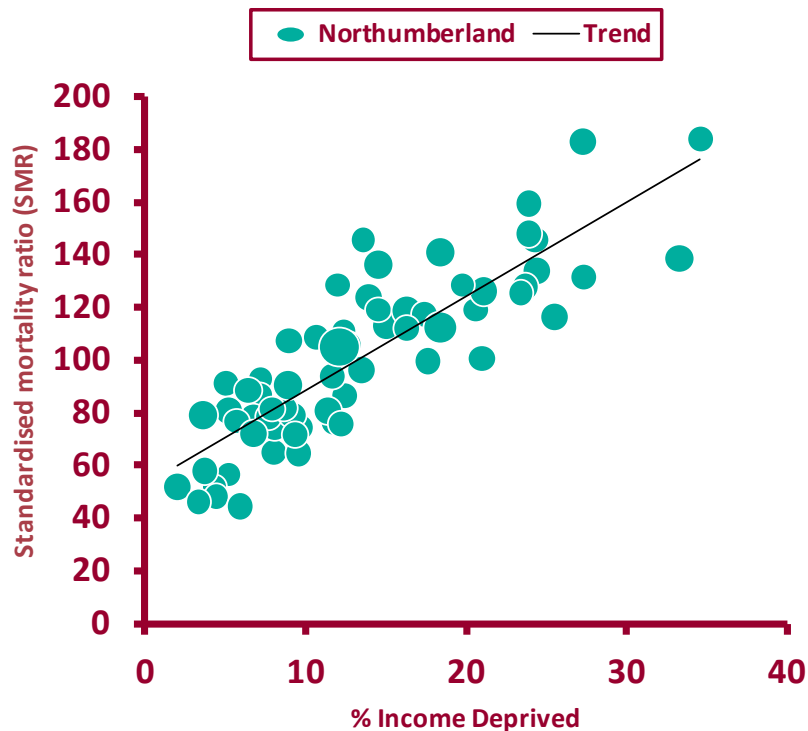
General Health - bad or very bad



Deaths from all causes, under 65 years

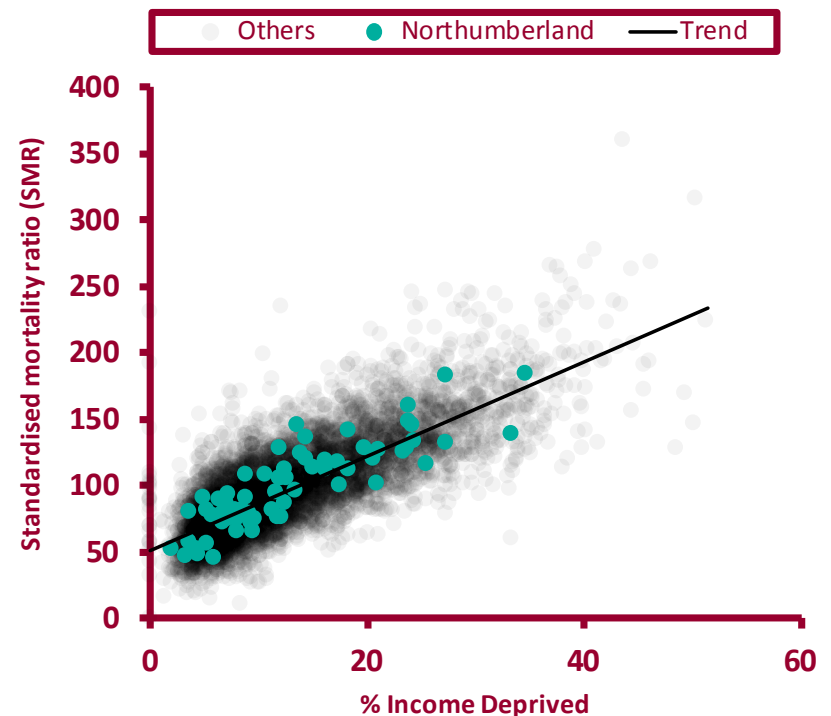
Northumberland

Deaths from all causes, under 65 years

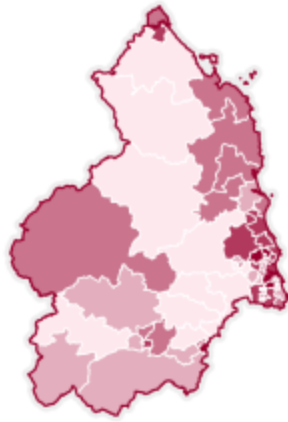


Within North East

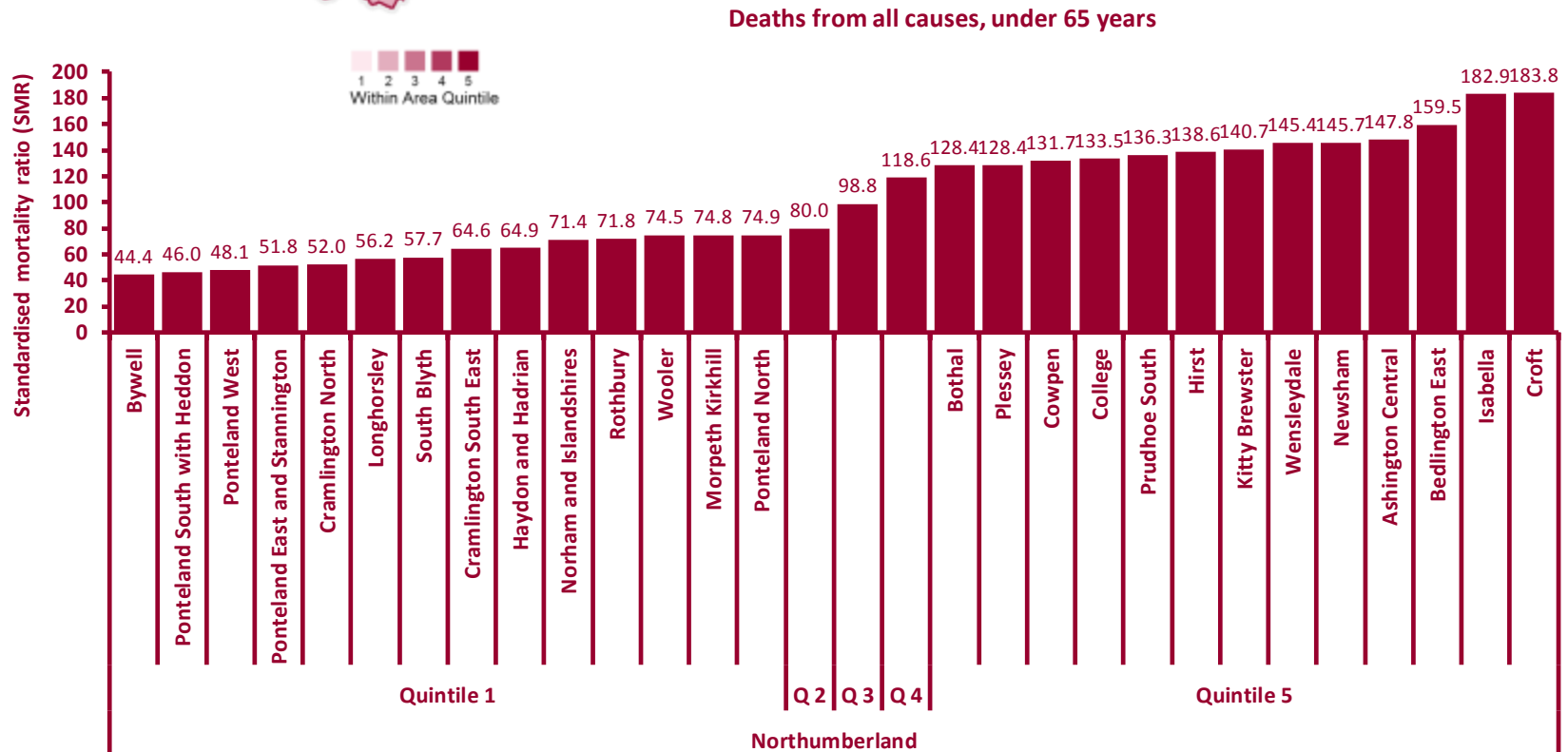
Deaths from all causes, under 65 years



Northumberland
Deaths from all causes, under 65 years



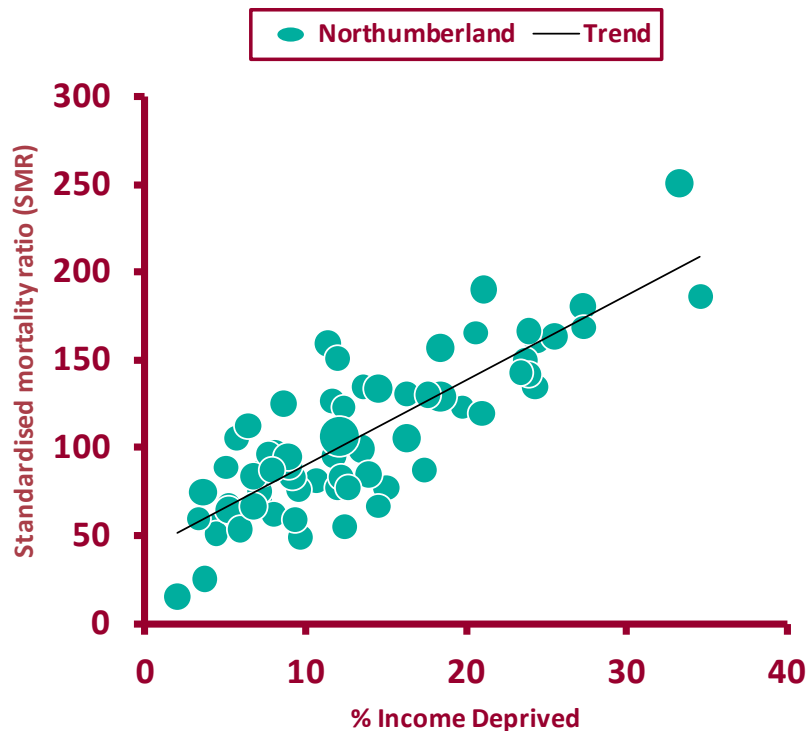
Deaths from all causes, under 65 years



Deaths from respiratory diseases, all ages

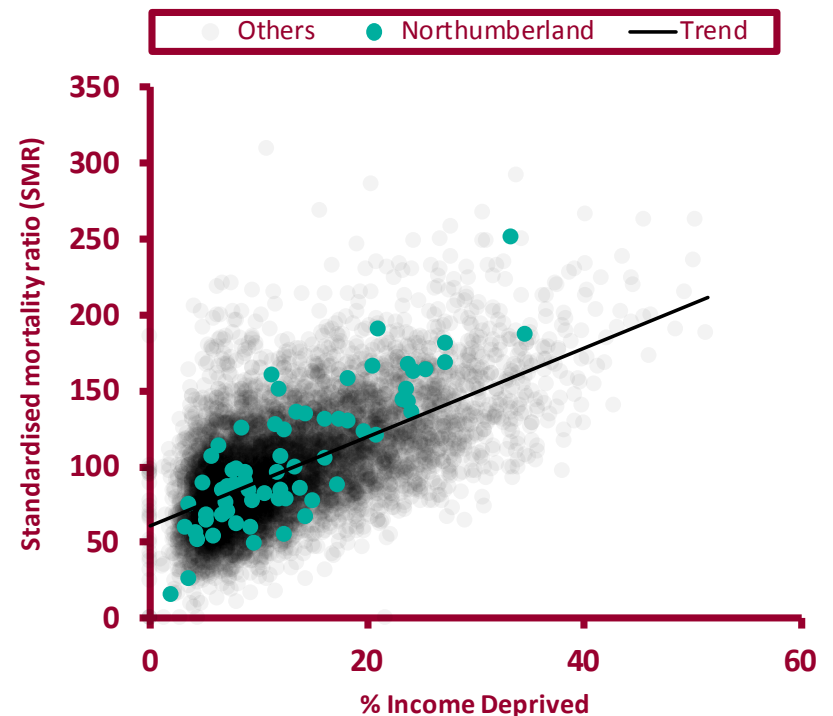
Northumberland

Deaths from respiratory diseases, all ages

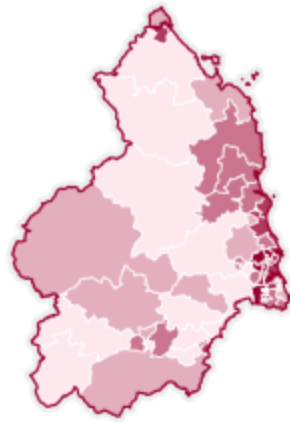


Within North East

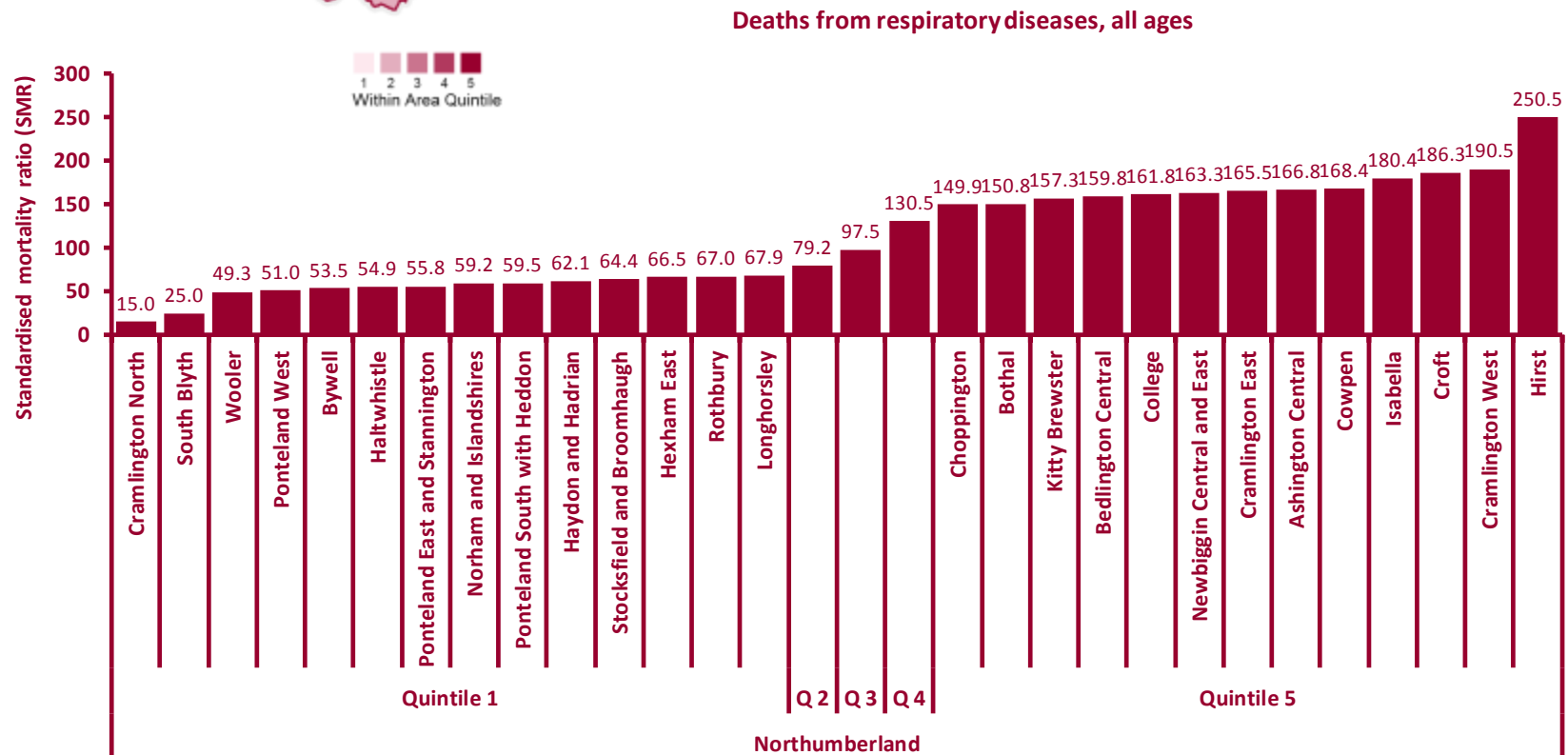
Deaths from respiratory diseases, all ages



Northumberland
Deaths from respiratory diseases, all ages



Deaths from respiratory diseases, all ages



Feedback

We'd like to hear your views on the Health Inequalities Briefings

**Please let us know your thoughts by completing our short survey
(by clicking on the link below):**

[Feedback on Inequalities Briefings](#)



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